



*From history of the disease
to History of the Health!*

**Informational-radiowave therapy.
Atlas for users of MINITAG® apparatus**

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Practical Handbook of informational-radiowave therapy. The book is intended for physicians and broad sections of users of MINITAG®¹ apparatus. There are presented summarized clinically explained the method of Informational radiowave therapy

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¹. Until 2007, the therapeutic apparatus was produced in the Russia under the brand name МИНИТАГ® [MINITAG] {MINITAG = miniature therapeutic automatic generator}. MINITAG® currently produced in Russia under the brand names Камертон™ [kamerton] {fork} and Камертон Здоровья® [kamerton zdorov`ya] {fork of health}. Therapeutic apparatus Kamerton is a complete analog therapeutic apparatus MINITAG® for therapeutic effects.

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Introduction

Human being is a integral organism. Each cell is responsible for all functions of entire organism, and entire organism is responsible for the function of every cell. It is impossible to be healthy if cells and organism are not resulted in a uniform denominator, adjusted on the information of the Life.

New philosophy of health

Contemporary age is characterized by a lot of complications for man:

- *the general status of health of people becomes worse, mortality rate is still high, and it exceeds the birth rate in some regions of the world;*
- *the patient's and physician's attitude to using of pharmacologic agents is negative because of its low efficiency in the most diseases, high side effects that increases chronic diseases;*
- *modern medicine is so specialized and it is not often directed "to treat not disease but entire body as integral organism";*
- *impossibility to create whole model of organism with its disorders limits using of specific organotropic therapy;*
- *most traditional methods of human progress lost its initial purpose on the end of second millennium.*

There have been made many efforts by scientists in order to find etiologic cause of diseases on morphologic-functional, biochemical, metabolic, genetic and even on psycho-emotional levels of functioning of human body. In result of this work complex chemical-medical-technical industry has been made with high specialization of the doctors, engaged in elimination of the secondary causes of diseases. Therefore unsolved problems arise in medicine, which should be solved with another technologies and methods.

For last ten years in the Centre of science of information medicine research, design and industrial - technological works on development new radio-electronic informationometric technologies in information medicine are executed.

On a joint of cybernetics, medicine, informatiology completely new direction was born in public health services which prospects of development are really fantastic. This direction has name – Informational medicine.

Realization of its programs made possible:

- *eliminate, measure and interpret diagnostic informational contents of signals emitted from human body and organs;*
- *reveal reflexogenic zones and points on human body emitted most informative and stable signals;*
- *prove experimentally and clinically that informational contents of emitted signals reflect metabolic condition of cells of human body. Changes of metabolic conditions of cells are precisely shown long before clinical manifestations of diseases. Actually it becomes possible to define stable deviations in metabolic conditions of cells of human body;*
- *define maximum clinical totality of reflexogenic zones and points of human body that shows the condition of informational homeostasis of human body, i.e., health condition;*
- *clinically confirm theoretic precondition that reverse influence of informational signals of healthy person (whose cells are in "healthy" condition) on reflexogenic zones of "sick" person. It prevents development of diseases and transition into chronic stage; at early stages of diseases it may lead to complete recovery. High therapeutic efficiency of new medical technology provides due to the influence on cellular level of human body with various diseases;*

- *experimentally prove that the signals from healthy organisms are identical. Informational contents of signals from healthy organs and organs with deviations from physiologic norm are different. Size of the deviations depends upon of severity of diseases;*
- *clinically define that pharmacologic treatment is expensive, has small predictability on human body and its organs;*

Creation of experimental model of the complex of information radiowave diagnostics for measuring of ultralow radiation of all alive and lifeless organisms became revolutionary step in scientific work in 1993. The developed method has confirmed a hypothesis about existence of intercellular signals to control organs and systems to maintain self-controlling process of self-regulation in human body. In particular these signals carry the information and constantly inform about our health condition. These signals are so weak since they occur on molecular level.

Illness is the sum of numerous disorders. Today modern methods of diagnostics only fix the fact of what changes and disorders are occurring in human body. On more detailed observation physicians detect series of dysfunctions in various systems at first sight unconnected between each other. In this case we have to consider all disorders to detect which of them are main and which of them are secondary. What dose and how long patient has to take medications also considering that pharmacologic agents have many adverse reactions. Unfortunately, we cannot give irrefragable answer on those questions. Medical science doesn't consider wholeness of human body. We can compare this with iceberg when we see just top part of it and bottom part is still unknown for us.

In the result of research works the signal has been detected. There is constant interchange of information between all organs and system of human body through this signal. Thus scientists were able to learn the most unknown part of diseases.

Diagnosing the patient each time, investigating all system and organs, for the first time it was possible to us to establish an original cause, i.e. original source of disease.

For eight years of clinical researches it was possible to reveal the certain laws at various diagnoses and to fix not only the cause of concrete illness, but also to register an involvement into pathological process of other organs and systems. In results we have developed further technique of health promotion.

The following significant step was creation of new means of therapy. Scientists managed to reproduce the signals fully accord with healthy cells. Result of all these researches was creation of device MINITAG[®].

Influencing by the device on information channels signals dysfunctions and disorders are eliminated in the organs involved into pathologic process. These signals have a unique nature.

Healthy mode of functioning comes back, i.e. physiological. And a healthy mode of functioning of cells is a pledge of your health.

In 1998 it was possible to declare about new development. But the question was about health of millions people, and, before to offer new technology to the patient, its authors have considered necessary to carry out numerous tests and carefully systematize the received data.

The method of informational radiowave therapy (IRT) is unique because it gives chance to recommend with high accuracy the recipe (program) of treatment of any of more than 350 diseases presented in this Atlas. In recipes there is nothing superfluous or casual, far-fetched and unreasonable.

The program has polytherapeutic effect, that is at treatment of one disease others recover also, even about what neither you, nor the doctor do not suspect.

Despite of youngish age for a science (informational medicine), IRT method has passed many approbation in clinical and scientific institutes in Russia and abroad.

It has been covered with treatment more than 20000 person from infantile up to old age. Results speak for themselves: in 96,94 % of cases recovery, significant or partial improvement of a condition of patients are marked and only in 3,06 % of cases therapeutic effect is not achieved. But it was not observed any case of an aggravation of disease. Within 8 years of application IRT both the nearest and remote results in various conditions have been investigated in-home, in polyclinics, in medical centers and high therapeutic effect has been marked.

In results of clinical tests of autoecology of human body it was found out: even if one person in the family is sick, it makes influence on every member of family. It is necessary to treat all family. Without it is useless to expect the good results of treatment. Knowing individual features of sick person, it is necessary to help him and to care about people who surround him. So it is possible to solve many medical problems in the family, and the most important is not involve new generation in hereditary process. Therefore it is desirable to have the device MINITAG[®] at home as family doctor.

If we compare the apparatus MINITAG[®] with physical therapy, reflexotherapy and the highest frequencies equipment we can notice principal differences. So, in 1996-2001 a lot of the devices widely used now have been investigated. Appeared, that some of them are even harmful for health. Also it was found out, that any means of therapy existing today has no research and practical base for confirmation and a substantiation of application in each concrete case of disease. Moreover, they cannot predict, as far as this or that influence is useful or harmful, what by-effects thus will be present, what changes will take place at a cellular level, for example, in 5-8 years.

Therefore we can affirm that:

- *New understanding how connection between organs and system is realized;*
- *It is possible to diagnose the initial cause of disease, prevent first symptoms and the development of disease;*
- *High therapeutic efficiency has been achieved with accelerating of recovery in 1,5-2,5 times without any recurrences;*
- *Combined treatment with pharmacological agents can decrease adverse reactions of medicines and increase its main effect;*
- *The technology is completely harmless, noninvasive that is very important characteristic for the treatment of children;*
- *The technology has very high social and economic efficiency.*
-

So we hope that apparatus MINITAG[®] may use not only medical workers but people who like to stay healthy during all life. If you have apparatus MINITAG[®] you can prevent the development of the disease; people with chronic disease may treat its.

We also see this book and apparatus MINITAG[®] in the briefcase of a family doctor for its will be claimed by the population at any age.

Authors express the gratitude to the Scientific Centre of informational medicine, heads and executors of experimental bases. Due to them, clinical experiment turned out well.

Beforehand we express gratitude to those readers (users) who will send their responses, remarks and offers concerning the book and an estimation of the suggested edition and an estimation of treatment. Sincerely yours,

Bessonov Alexey, professor,
Kalmykova Elena, professor.

April, 2011.
Moscow

How to use atlas?

It is important to know!

To make treatment effective physician should form diagnosis.

If patient has few diseases treatment should be provided separately for each problem.

Read applications instructions before using the MINITAG[®] apparatus.

In this chapter we will teach you how quickly and precisely find necessary information in the recommendations of applying apparatus MINITAG[®]. We will show how to find necessary diseases and perform treatment, how to use the illustrations.

The index contains more than 350 diseases and syndromes with page numbers where you may find necessary disease. For example, the disease - “pharyngitis” is described on page number ... (Chapter 7, Respiratory disorders). On that page you will find short description of clinical manifestations of that disease and recommendations how to treat the problem. The recommendation consists of therapeutic sessions with recommended zones for electromagnetic exposure and how to apply its.

Therapeutic session

Therapeutic session is the time of treatment procedure when patient is supposed to use the recommended zones for electromagnetic exposure.

Recommended zone

This term you will meet every time when you use the apparatus MINITAG[®]. To make effective treatment it is important to detect exact localization of the recommended zones. Since the zone have diameter of 10 millimeter or more it is not difficult to detect its localizations with the illustrations.

How to find the recommended zone?

There are color illustrations of human body in the Atlas. The recommended zone is numerated with two figures. The first figure signifies the page number of illustrations, second figure signifies the recommended zone.

For example, for pharyngitis *the recommended zones for electromagnetic exposure* are:

2-4 (CV-23), **16-1**(ST-36), **11-4**(LI-4), **1-8** (LI-20), **11-5** (SI-2).

So, in order to find **2-4**(CV-23) zone open page number 2 and find the picture of **2-4** zone on the left side, you will find on the right side of sheet the description of its localization.

In order to find **16-1**(ST-36) zone open page number 16 and find the picture of **16-1**(ST-36) on the left side, you will find on the right side of sheet the description of its localization.

In the same way, you may find other recommended zones of other diseases, extra points and recommended zone for concomitant problem (syndromes and symptoms).

How to find the localization of zone according to it description?

There are descriptions of recommended zones for electromagnetic exposure to find its easier. We used except regular millimeters traditional Chinese unit of measurement – chon also called “Chinese inch”. Every person has his/her own individual chon.

Chon (picture 1) is a distance between skin folds of middle phalanx of bent second finger. For female it is right hand; for male it is left hand. Every patient should use **only** his/her hand not other person’s hand.

There are rulers in the unit with apparatus. You may write names of your relatives on its. So every member of the family will have his/her own ruler. Take regular millimeter ruler and measure the length of your individual chon. For example, the length of your chon is 22 millimeters. On back side of ruler sign your chon with step of a half of chon. It means that in your case a half of your chon is 11 millimeters; 1 chon is 22 millimeters; 1,5 chon is 33 millimeters; 2 chon is 44 millimeters; 2,5 chon is 55 millimeters; 3 chon is 66 millimeters and so on. Entire therapeutic session takes 5 minutes.

If individual chon of child is 10 millimeter than a length will be different. Nevertheless principle is the same. It is necessary to remember that child grows and a length of child's chon changes. Therefore it is necessary to make alterations on growing body's rulers regularly.

To find points use the rulers. It is difficult to detect the points. Usually users of apparatus may easily detect points on second therapeutic session already.

More about detection of recommended zones for electromagnetic exposure (picture 2)

Put together your fingers to determine the length of your chon. For example, the distance between external surface of fifth finger and external surface of second finger is 3 chon; the distance between external surface of fourth finger and external surface of second finger is 2 chon. This method you may use to detect recommended zones for electromagnetic exposure on the body. You may use any method suitable for your.

Please draw attention on pictures and color illustrations. It may be very useful for you.

Reference

To detect recommended zones for electromagnetic exposure you may use anatomical structures – bone prominence, hair margin, nail bed, nipples, skin folds, hollows etc. On palpation of zone of electromagnetic exposure you may feel indurations, futility, “slidable” skin or “electrical prick”, pain, numbness and other symptoms.

How to changes the zone of electromagnetic exposure?

We will give 3 examples of diseases to show how to change the zone for electromagnetic exposure.

Migraine

Recommended zones for electromagnetic exposure: 3-1(GV-20), 4-3(TE-20), 3-6(GB-20), 3-5(GV-16), 12-7(HT-5), 11-4(LI-4), 16-1(ST-36), 12-4(PC-6), 15-1(SP-6).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes for each zone. Change the zone during the therapy. The treatment course is 10 days. Repeat therapy every month until complete recovery.

On the first day use first 5-6 zones from recommended zones for electromagnetic exposure. On the second day use next 5-6 zones, and so on (for example on the second day of treatment use the rest 3-4 zones and again the first 2-3 zones).

For example,

First day of treatment: **3-1, 4-3, 3-6, 3-5, 12-7**

Second day of treatment: **11-4, 16-1, 12-4, 15-1, 3-1, 4-3**

Third day of treatment: **3-6, 3-5, 12-7, 11-4, 16-1, 12-4**

Continue in same manner according to the treatment plan.

Degenerative joint disease (Osteoarthritis)

Recommended zones for electromagnetic exposure: **16-1**(ST-36), **16-3**(ST-41), **11-4**(LI-4),
13-5(GB-40), **14-1**(BL-40),
13-3(BL-60), **13-4**(BL-62), **13-7**(BL-67),
12-5(LU-7), **10-5**(LI-11), **12-4**(PC-6),
11-2 (TE-5).

Extra points

For wrist joint pain and pain in the arm: **11-3**(TE-4), **11-4**(LI-4), **12-10**(PC-7);

For elbow joint pain: **10-5**(LI-11), **12-3**(HT-3), **12-1**(LU-5), **11-1**(TE-6);

For shoulder joint pain: **8-4**(SI-14), **10-2**(LI-15), **8-3**(GB-21), **10-1**(TE-14),

11-1(TE-6), **11-4**(LI-4), **12-7**(HT-5);

for knee joint pain: **18-3**(LR-8), **14-1**(BL-40), **13-1**(GB-34), **18-5**(SP-10), **9-10**(GB-30);

for hip joint pain: **16-1**(ST-36), **9-11**(BL-36), **9-10**(GB-30), **9-5**(GV-3),

14-1(BL-40);

for ankle joint pain: **13-5**(GB-40), **16-4**(LR-3), **15-3**(KI-3), **13-3**(BL-60);

for shoulder and forearm pain: **10-6**(LI-10), **10-5**(LI-11), **11-1**(TE-6);

for leg and foot pain: **13-1**(GB-34), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The treatment course is 10-12 days. It is recommended to repeat the six's treatment course with break of 2 weeks during 4 months. The treatment requires long-term care. Combine with physical exercises, massage, and swimming.

There are extra points for electromagnetic exposure except main recommended zones for electromagnetic exposure for concomitant symptoms (syndromes). Change the zones like in example A, add 1-3 extra points next days. Use not more points than it is recommended (*Recommended zones for electromagnetic exposure*).

For example, for shoulder joint pain,

of treatment: **16-1, 16-3, 11-4, 13-5, 8-4, 10-2.**

First day *Second day of treatment:* **14-1, 13-3, 13-4, 13-7, 8-3, 10-1.**

Third day of treatment: **12-5, 10-5, 12-4, 11-2, 11-1, 11-4, 12-7.**

Continue according the treatment course.

Keratitis

Recommended zones for electromagnetic exposure:

*First day - 1-5(TE-23), 1-7(GB-1) right and left sides, 1-9(ST-2) right and left sides,
7-5(KI-14),16-1(ST36);*

*Second day - 1-4(BL-1) right and left sides, 1-5(TE-23), 3-7(BL-10), 11-4(LI-4), 16-5(LR-2),
16-9(GB-43).*

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. In the first 2-3 days it is recommended to perform therapeutic sessions twice daily. The duration of the treatment is 8-10 day.

On the first day of treatment use the zones for the first day.

On the second day of treatment use the zones for the second day.

On the third day of treatment use the zones for the first day.

Follow that scheme during all treatment courses.

Write down all diseases and recommended zones for electromagnetic exposure you are interested in and use color illustrations.

To make comfortable treatment write down scheme of treatment.

Would you like to learn more?

There are enclosures with “The basis of informational medicine” for those people who are interested in that information.

There are the table of conformity of points of classical meridians to zones of sheets and the table of conformity of zones of sheets to points of classical meridians in this atlas.

Chapter 1. Endocrine disorders

1.1. Endemic goiter

Approximately 5% of the world's populations have goiters. Of these, about 75% are in persons dwelling in geographic regions characterized by significant iodine deficiency. Areas of iodine deficiency are found in 115 countries, mostly in developing areas but also in areas of Europe.

Endemic goiters may become multinodular and very large. Some patients with endemic goiter may become hypothyroid. Other may become thyrotoxic as the goiter grows and becomes more autonomous, especially if iodine is added to the diet.

Symptoms are depend upon what kind of thyroid disorder patient has.

Treatment is conservative (iodine supplementation, thyroid hormone replacement) and surgical (progressive enlargement of thyroid, presence of nodules).

Informational radiowave therapy may be applied on different stages of disease and in combination with other methods.

When informational radiowave therapy combines with conservative treatment the dose of hormones may be reduced and adverse reactions are prevented.

In combination with surgical method the informational radiowave therapy may be applied in preoperative and postoperative periods to prevent the complications.

It is necessary also to expose zones which organ and system are affected.

Recommended zones for electromagnetic exposure: **2-6**(ST-10) *right and left sides*, **5-1**(CV-22), **11-4**(LI-4), **10-5**(LI-11), **12-9**(HT-7), **3-1**(GV-20), **16-5**(LR-2).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 8-10 days every month during 6 months.

1.2. Nontoxic goiter

Nontoxic goiter is diffuse or nodular enlargement of the thyroid gland not in the regions of dietary iodine deficiency. Predisposing factors include:

- genetic;
- environmental (protein deficiency in the diet; chronic intoxication of pesticides, lead and mercury compounds);
- endogenous (pregnancy, menopause, chronic diseases, stress)

Patients may have no symptoms in early stage. On examination doctor may reveal diffuse or nodular enlargement of thyroid gland. In late stage when clinical manifestations appear patients have foreign body sensations on swallowing, chillness, weakness, hypothermia, bradycardia, weight gain.

Treatment consists of conservative regimens (balanced diet, thyroid hormone replacement therapy) and surgical when patient has indication (progressive thyroid enlargement, compressive symptoms).

Informational radiowave therapy may be applied on different stages of disease and in combination with other methods.

When informational radiowave therapy combines with conservative treatment the dose of hormones may be reduced and adverse reactions are prevented.

In combination with surgical method the informational radiowave therapy may be applied in preoperative and postoperative periods to prevent the complications.

It is necessary also to expose zones which organ and system are affected.

Recommended zones for electromagnetic exposure: **11-4**(LI-4), **10-5**(LI-11), **2-6**(ST-10) *right and left sides*, **16-5**(LR-2), **12-3**(HT-3), **5-1**(CV-22), **3-1**(GV-20), **12-9**(HT-7).

Use 5-6 zones for one therapeutic session. Expose 5 minutes each area. Change zones for electromagnetic exposure during the therapy. The duration of treatment is 8-10 day every month during 6 months.

1.3. Thyroiditis

Thyroiditis may be classified as follows: (1) chronic lymphocytic (“Hashimoto’s”) thyroiditis due to autoimmunity, (2) subacute thyroiditis, (3) suppurative thyroiditis, and (4) Riedel’s thyroiditis. Hashimoto’s thyroiditis – Hashimoto’s thyroiditis – also called chronic lymphocytic thyroiditis – is the most common form of thyroiditis. It tends to be familial and is six times more common in women than in men.

Subacute thyroiditis – This fairly common disorder – also called de Quervain’s thyroiditis, granulomatous thyroiditis, giant cell thyroiditis – is an acute, usually painful enlargement of the thyroid gland, with dysphagia. The pain may radiate to the ears. Viral infection has been suggested as the cause.

Suppurative thyroiditis – Suppurative thyroiditis is a rare disorder causing severe pain, tenderness, redness, and fluctuation in the region of the thyroid gland. It is caused by pyogenic organisms, usually in the course of systemic infection.

Riedel’s thyroiditis – Riedel’s thyroiditis is also called chronic fibrous thyroiditis, Riedel’s struma, woody thyroiditis, ligneous thyroiditis, and invasive thyroiditis. It usually causes hypothyroidism and may cause hypoparathyroidism as well. It is the rarest form of thyroiditis and is found most frequently in middle-aged or elderly women.

An abnormality of the thyroid gland in which secretion of thyroid hormone is usually increased and is no longer under regulatory control of hypothalamic-pituitary centers; characterized by a hypermetabolic state, usually with weight loss, tremulousness, elevated plasma levels of thyroxin and/or triiodothyronine, and sometimes exophthalmos; may progress to severe weakness, wasting, hyperpyrexia, and other manifestations of thyroid storm; often associated with exophthalmos (Graves disease). Thyrotoxicosis due to any cause produces many different manifestations of variable intensity among different individuals.

Variety of clinical symptoms is caused that it affects almost all body function. Involvement of cardiovascular system manifests in tachycardia, arrhythmia, increasing of pulse pressure. Gastrointestinal manifestations include dyspeptic disturbances, fatty liver degeneration. Many patients complain of eye problems: big glitter eyes, exophthalmos. Involvement of central nervous system manifests in emotional lability, sleep disorders, dizziness. Endocrine manifestations include dysmenorrhea in women, and impotence in men.

The management of thyrotoxicosis may be conservative (hormone replacement therapy, immunotherapy and other methods) and surgery when conservative methods give no results. Informational radiowave therapy may be applied on different stage of disease and in combination with any other method.

In combination hormone replacement therapy with informational radiowave therapy the dose of hormone may be reduced so it may decrease its adverse reaction on patient’s body.

In combination with surgical method the informational radiowave therapy may be applied in preoperative and postoperative periods to prevent the complications (hypothyroidism, hypoparathyroidism, vocal cord paralysis).

It is necessary also to expose zones which organ and system are affected.

During the informational radiowave therapy patient may have discomfort sensation. Patient should be encouraged to take patience and not stop treatment. These reactions usually are self-limited and don’t need any treatment. After therapeutic session patient may have relaxation and sleepiness; patient should be recommended to have some rest.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 3-6(GB-20), 4-7(TE-17),

4-3(TE-20), **2-6**(ST-10) *right and left sides*,
12-9(HT-7), **12-2**(PC-3), **5-1**(CV-22),
16-5(LR-2).

Extra points

For hoarseness: 4-5(SI-19), **2-4**(CV-23);

For dry cough: 12-5(LU-7), **5-5**(CV-17);

For exophthalmos: 1-4(BL-1), **1-7**(GB-1), **1-9**(ST-2).

Use 5-6 zones for one therapeutic session. Expose for 5 minutes each area, change zones during therapy. The treatment is 8-10 days every month for 6 months.

1.4. Hypothyroidism

Thyroid hormone deficiency may affect virtually all body functions. Hypothyroidism may be due to primary disease of thyroid gland itself or lack of pituitary TSN. Although gross forms of hypothyroidism, ie, myxedema and cretinism, are readily recognized on clinical ground alone, the far more common mild forms often escape detection without adequate laboratory testing.

Frequent symptoms are fatigue, lethargy, weakness, arthralgias or myalgias, muscle cramps, cold intolerance, constipation, dry skin, headache, and menorrhagia.

Treatment is usually conservative and consists of thyroid hormone replacement therapy and symptomatic therapy.

Informational radiowave therapy in early stages of disease may normalize function of endocrine system and patient is not required to take thyroid hormone agents.

If informational radiowave therapy starts later when clinical symptoms appeared it may result in reduction of hormone dose and its adverse effects.

Patients with hypothyroidism may not feel any sensory reactions or have mild reactions.

After informational radiowave therapy of patients with hypothyroidism patients should check hormone levels in blood and then take oral medications.

Recommended zones for electromagnetic exposure: 11-7(TE-1), **4-3**(TE-20),
2-6 (ST-10) *right and left sides*,
16-1(ST-36), **11-4**(LI-4), **5-1**(CV-22),
7-3(CV-8).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 8-10 days. Repeat therapy each month. The treatment is long-term.

1.5. Hyperparathyroidism & hypoparathyroidism

Primary hyperparathyroidism is an increasingly recognized disorder, present in up to 0.1% of adult patients examined. It can be seen at any age but is more frequent in persons over the age of 50 and is three times more common in women than in men.

The disease is caused by hypersecretion of parathyroid hormone, usually by a parathyroid adenoma, and less commonly by hyperplasia or carcinoma (rare). The pathologic classification of parathyroid adenoma versus hyperplasia is difficult when examining an isolated gland.

Hypercalcemia is usually discovered accidentally by blood “biochempanel” screening. Most patients are asymptomatic. Parathyroid adenomas are usually so small and deeply located in the neck that they are almost never palpable; when a mass is palpated, it usually turns out to be an incidental thyroid nodule.

The management of hyperparathyroidism is combined: informational radiowave therapy and surgical; the management of secondary hyperparathyroidism includes informational radiowave therapy in combination with pharmacologic agents, and also symptomatic.

Hypoparathyroidism is most commonly seen following thyroidectomy, when it is usually transient but may be permanent. It may also occur after surgical removal of a parathyroid adenoma for primary hyperparathyroidism due to suppression of the normal parathyroids and accelerated remineralization of the skeleton (hungry bone syndrome).

Pseudohypoparathyroidism is a genetic defect of tissue resistance to PTH associated with short stature, round face, obesity, short fourth metacarpals and metatarsals, ectopic bone formation, and mental retardation.

Acute hypoparathyroidism causes tetany, with muscle cramps, irritability, carpedal spasm, and convulsions; tingling of the circumoral area, hands, and feet is almost always present.

Conservative treatment of hypoparathyroidism consists of oral administration of parathyroidin, calcium agents and symptomatic agents. Transplantation of parathyroid glands is practiced recently. Informational radiowave therapy improves all body functions involved in pathologic process; it has beneficial effect also on conservative and surgical treatment.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 2-6(ST-10) right and left sides, 5-1 (CV-22), 8-2(BL-11), 2-9(HT-7), 12-4(PC-6), 7-3(CV-8).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes for each area. The treatment course is 8-10 days. Repeat therapy every month during 6 months.

1.6. Obesity

Obesity is a common problem, but rarely is there an identifiable endocrine cause. Instead, obesity can usually be attributed to other factors. Physical inactivity can cause some weight gain. Aging also plays a role in obesity, since adults gain an average of 0.1 kg/m² per year between ages 20 and 63. Genetics is the most important determinant for obesity.

Several endocrine disorders do cause obesity (Cushing's syndrome, hypothyroidism, pancreatic insulinomas, growth hormone deficiency, estrogen replacement therapy, hypothalamic lesions).

The management of obesity is complex: diet, physical exercises, and symptomatic treatment.

Informational radiowave therapy is directed to normalization of nervous and endocrine system function, treatment of symptoms of other organs and systems involved in pathologic process.

Recommended zones for electromagnetic exposure: 4-3(TE-20), 11-7(TE-1), 2-6(ST-10), 8-3(GB-21), 3-1(GV-20), 12-9(HT-7), 8-1(GV-14), 16-5(LR-2), 16-1(ST-36), 7-6(CV-4).

Use 5-6 zones for one therapeutic session every day. Expose for 5 minutes for each area. Change the zones during treatment time. The treatment course is 10 days every month. The informational radiowave therapy of obesity is long and patient should be encouraged to be patient and follow doctor's recommendations. Patient should be advised to use other points from affected organ and systems.

1.7. Diabetes mellitus

Diabetes mellitus – a chronic metabolic disorder in which utilization of carbohydrate is impaired and that of lipid and protein enhanced; it is caused by an absolute or relative deficiency of insulin and is characterized, in more severe cases, by chronic hyperglycemia, glycosuria, water and electrolyte loss, ketoacidosis, and coma; long-term complications include neuropathy, retinopathy, nephropathy, generalized degenerative changes in large and small blood vessels, and increased susceptibility to infection.

In type 1 of diabetes mellitus, which typically causes symptoms before age 25, an autoimmune process is responsible for beta cell destruction.

Type II diabetes mellitus is characterized by insulin resistance in peripheral tissues as well as a defect in insulin secretion by beta cells. Insulin regulates carbohydrate metabolism by mediating the rapid transport of glucose and amino acids from the circulation into muscle and other tissue cells, by promoting the storage of glucose in liver cells as glycogen, and by inhibiting gluconeogenesis. The normal stimulus for the release of insulin from the pancreas is a rise in the concentration of glucose in circulating blood, which typically occurs within few minutes after a meal. When such a rise elicits an appropriate insulin response, so that the blood level of glucose falls again as it is taken into cells, glucose tolerance is said to be normal. The central fact in diabetes mellitus is an impairment of glucose tolerance of such degree as to threaten or impair health.

Treatment should be complex:

Diet. A well-balanced, nutritious diet remains a fundamental element of therapy. These patient are advised to limit their carbohydrate content.

Adequate physical activity. Weight reduction is an elusive goal that can only be achieved by close supervision and education of the obese patient.

Pharmacologic treatment for hyperglycemia.

Treatment of concomitant diseases.

Informational radiowave therapy may be applied in any forms of diabetes mellitus. The most important therapeutic action of informational radiowave therapy is stabilization glucose level in blood that physician can adjust the dose of glucose-lowering agents. Informational radiowave therapy of diabetes mellitus II type mild and moderate forms may result in normalization of glucose in the blood. Informational radiowave therapy prevents disturbances of metabolism and other complications of diabetes mellitus.

Treatment regimens should be individualized depending on patient's symptoms, concomitant diseases, and complications if any patient has.

Recommended zones for electromagnetic exposure: **7-3**(CV-8), **11-3**(TE-4), **15-8**(KI-1),
16-1(ST-36), **15-6**(SP-4), **4-3**(TE-20),
12-10(PC-7), **15-1**(SP-6), **15-5**(KI-2),
2-3(CV-24), **16-5**(LR-2), **13-3**(BL-60).

Extra points:

For retinopathy: **1-4** (BL-1) right and left sides, **4-8**(GB-12), **3-6**(GB-20),
1-5(TE-23), **1-7**(GB-1) right and left sides.

For diabetic foot: **14-1**(BL-40).

Use 5-6 zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the therapy. The therapy is 10 days each month. The informational radiowave therapy of diabetes mellitus is long and patient should be encouraged to be patient.

Chapter 2. Psychiatric disorders

2.1. Stress & Adjustment disorders (Situational Disorders)

Stress exists when the adaptive capacity of the individual is overwhelmed by events. The event may be an insignificant one objectively considered, and even favorable changes (eg, promotion and transfer) requiring adaptive behavior can produce stress. For each individual, stress is subjectively defined, and the response to stress is a function of each person's personality and physiologic endowment.

Treatment

Behavioral: Stress reduction techniques include immediate symptom reduction or early recognition and removal from a stress source before full-blown symptoms appear. It is often helpful for the patient to keep a daily log of stress precipitators, responses, and alleviators. Relaxation and exercise techniques are also helpful in reducing the reaction to stressful events.

Social: The stress reactions of life crisis problems are – more than any other category – a function of psychosocial upheaval, and patients frequently present with somatic symptoms.

Psychologic: Prolonged in-depth psychotherapy is seldom necessary in cases of isolated stress response or adjustment disorder.

Medical.

Modern human activity associates with psychologic tension that may cause pathologic changes in emotional sphere. Neurosis is most common disorders. Informational radiowave therapy normalizes higher nervous activity, has reinforcing action.

Recommended zones for electromagnetic exposure: 1-4(BL-1), **1-7**(GB-1), **3-1**(GV-20),
15-1(SP-6), **5-5**(CV-17), **12-10**(PC-7),
12-7(HT-5), **3-6**(GB-20), **15-4**(KI-6),
15-1(SP-6), **14-1**(BL-40), **16-1**(ST-36).

Use 5-6 zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment is 8-10 days. Repeat the therapy each month until complete recovery.

2.2. Sleep disorders (Insomnia)

Patients may complain of difficulty getting to sleep or staying asleep, intermittent wakefulness during the night, early morning awakening, or combination of any of these. Transient episodes are usually of little significance. Stress, caffeine, physical discomfort, daytime napping, and early bedtimes are common factors.

Psychiatric disorders are often associated with persistent insomnia.

Abuse of alcohol may cause or be secondary to the sleep disturbance.

Heavy smoking (more than a pack a day) causes difficulty falling asleep – apparently interdependently of the often associated increase in coffee drinking.

Sedative-hypnotics – specifically, the benzodiazepines, which are the prescription drugs of choice to promote sleep – tend to increase total sleep time, decrease sleep latency, and decrease nocturnal awakening.

Persistent insomnias are also related to a wide variety of medical conditions, particularly delirium, pain, respiratory distress syndromes, uremia, asthma, and hypothyroidism. Adequate analgesia and proper treatment of medical disorders will reduce symptoms and decrease the need for sedatives.

Recommended zones for electromagnetic exposure: **12-1**(LU-5), **12-9**(HT-7), **12-10**(PC-7),
13-4(BL-62), **15-4**(KI-6), **16-7**(ST-44),
16-8(ST-45).

Extra points

For terrifying arousal from sleep and superficial sleep: **3-6**(GB-20), **1-3**(BL-2), **12-6** (LU-9);

For difficulty getting to sleep: **11-6**(HT-9), **12-14**(PC9), **16-5** (LR-2).

Use 5-6 zones for one therapeutic session. Expose for 3 minutes each area. Change the zones during the treatment course. The duration of the treatment is 5 days

2.3. Mood disorders (Depression)

Depression is extremely common, with up to 30% of primary care patients having depressive symptoms. Depression may be the final expression of (1) genetic factors (neurotransmitter dysfunction), (2) developmental problems (personality defects, childhood events), or (3) psychosocial stresses (divorce, unemployment). It frequently presents in the form of somatic complaints with negative medical workups. Although sadness and grief are normal responses to loss, depression is not. Grief is usually accompanied by intact self-esteem, whereas depression is marked by a sense of guilt and worthlessness.

Depression associated with reactive disorders usually does not call for drug therapy and can be managed by psychotherapy and the passage of time.

Informational radiowave therapy in combination with psychotherapy is recommended for management of depression.

Recommended zones for electromagnetic exposure:

First day - **11-4**(LI-4), **10-5**(LI-11), **16-1**(ST-36), **7-6**(CV-4), **3-1**(GV-20), **15-1**(SP-6);

Second day - **3-7**(BL-10), **14-1**(BL-40), **12-10**(PC-7), **3-6**(GB-20), **2-2**(ST-3), **12-9**(HT-7);

Third day - **3-1**(GV-20), **16-5**(LR-2), **15-4**(KI-6), **12-9**(HT-7), **6-2**(CV-14), **12-14**(PC-9).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the treatment. The treatment course lasts usually 12 days. Repeat treatment course every months during 4-6 months.

Manic-depressive episodes

This form is most serious form of depression and may be complicated by suicide. Depending upon of severity of patient's mood status physician may formulate and institute a treatment plan.

Informational radiowave therapy in combination with other forms of treatment increases the effects of management of this condition.

Recommended zones for electromagnetic exposure:

For manic episodes - **16-8**(ST-45), **1-3**(BL-2), **13-6**(BL-65), **15-8**(KI-1), **12-4**(PC-6), **18-3**(LR-8),
18-1(GV-1), **6-2**(CV-14);

For depressive episodes - **12-3**(HT-3), **12-9**(HT-7), **11-6**(HT-9), **12-6**(LU-9), **11-7**(TE-1),
3-5(GV-16), **7-3**(CV-8), **6-2**(CV-14).

Use 5-6 of recommended zones for one therapeutic session. Expose each area for 5 minutes.

Change the zones during the treatment. The duration of treatment is 10 days. Repeat the therapy each month until complete recovery.

2.4. Anxiety disorders & dissociative disorders

Stress, fear, and anxiety all tend to be interactive. The principal components of anxiety are psychologic (tension, fears, difficulty in concentration, apprehension) and somatic (tachycardia, hyperventilation, palpitations, tremor, sweating). Other organ systems (eg, gastrointestinal) may be involved in multiple system complaints. Fatigue and sleep disturbances are common. Sympathomimetic symptoms of anxiety are both a response to a central nervous system state and a reinforcement of further anxiety. Anxiety can become self-generating, since the symptoms reinforce the reaction, causing it to spiral. This is often the case when the anxiety is an epiphenomenon of other medical or psychiatric disorders.

Anxiety may be free-floating, resulting in acute anxiety attacks, occasionally becoming chronic. When one or several defense mechanisms are functioning, the consequences are well-known problem such as phobias, conversion reactions, dissociative states, obsessions, and compulsions.

Anxiety neurosis is disorder characterized by fears that are the main symptoms of that disease.

Recommended zones for electromagnetic exposure: 12-9_(HT-7), 3-1_(GV-20), 5-5_(CV-17),
12-2_(PC-3), 12-4_(PC-6), 1-1_(GV-24).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The duration of the treatment course is 10 days. Repeat the therapy each month for 4-6 months.

Phobic disorder: phobic ideation can be considered a mechanism of “displacement” in which patients transfer feelings of anxiety from their true object to one that can be avoided.

Recommended zones for electromagnetic exposure: 12-8_(HT-6), 12-9_(HT-7), 13-7_(BL-67),
16-4_(LR-3), 12-2_(PC3), 12-4_(PC-6),
4-4_(TE-19), 1-1_(GV-24).

Use 5-6 zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the treatment. The duration of the treatment is 8-10 days. Repeat the therapy each month for 6 months.

Nervous exhaustion is characterized by dystrophoneurosis, overstrain. It is one of the common forms of neurosis. The main symptoms are irritability, nervousness, headache, dyssomnias, appetite loss, depression, chest pain, palpitations.

Recommended zones for electromagnetic exposure: 3-1_(GV-20), 5-5_(CV-17), 8-3_(GB-21),
9-2_(GV-4), 11-2_(TE-5), 12-4_(PC-6),
10-5_(LI-11), 15-1_(SP-6), 12-9_(HT-7).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes for each zone. Change the recommended zones for electromagnetic exposure during the therapy. The duration of the treatment course is 8-10 days. Repeat therapy every month until complete recovery.

Hysteric neurosis is neurotic condition characterized by various somatic and psychologic complaints. It is dissociative disorder. It affects most commonly women 20-40 ages.

Recommended zones for electromagnetic exposure: 12-8_(HT-6), 11-2_(TE-5), 3-4_(GV-17),
12-2_(PC-3), 12-10_(PC-7), 3-7_(BL-10),
8-7_(BL-15), 12-1_(LU-5), 15-1_(SP-6),
6-5_(GB-24).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes for each zone. Change the recommended zones for electromagnetic exposure during the therapy. The duration of the treatment course is 8-10 days. Repeat therapy every 3 months for one year.

2.5. Chronic pain disorders

Components of the chronic pain syndrome consist of anatomic changes, chronic anxiety and depression, anger, and changed lifestyle. Usually, the anatomic problem is irreversible, since it has already been subjected to many interventions with increasingly unsatisfactory results.

Changes in lifestyle involve some of the so-called pain games. These usually take the form of a family script in which the patient accepts the role of being sick, and this role then becomes the focus of most family interactions and may become important in maintaining the family, so that neither the patient nor the family wants the patient's role to change.

The cornerstone of a unified approach to chronic pain syndrome is a comprehensive behavioral program. This is necessary to identify and eliminate pain reinforcers, to decrease drug use, and to use effectively those positive reinforcers that shift the focus from the pain.

Recommended zones for electromagnetic exposure are painful areas that patient may show. Expose its for 3-5 minutes until pain disappears.

*And also expose following zones: **3-1**(GV-20), **4-3**(TE-20) both sides, **5-5**(CV-17), **11-4**(LI-4), **12-10**(PC-7), **16-4**(LR-3), **15-1**(SP-6).*

Use 5-6 zones for one therapeutic session. Expose for 5 minutes each area. Change zones during therapy. The treatment course is 8-10 days. Keep repeating therapy each month during 3 months.

2.6. Alcohol dependency & abuse (Alcoholism)

Alcoholism is a syndrome consisting of two phases: problem drinking and alcohol addiction. Problem drinking is the repetitive use of alcohol, often to alleviate anxiety or solve other emotional problems. Alcohol addiction is a true addiction similar to that, which occurs following the repeated use of other sedative-hypnotics.

The signs of alcoholic intoxication are the same as those of overdosage with any other central nervous system depressant: drowsiness, errors of commission, psychomotor dysfunction, disinhibition, dysarthria, ataxia, and nystagmus.

Successful treatment of alcohol dependency may achieve by informational radiowave therapy.

The primary goal of treatment is detoxication, elimination of fears, mood swings, sleep disorders and anorexia. It is recommended to do 4 therapeutic sessions in 2-3 hours on the first day of the therapy.

Recommended zones for electromagnetic exposure:

*First therapeutic session - **3-1**(GV-20), **5-5**(CV-17), **11-4**(LI-4), **12-9**(HT-7), **12-10**(PC-7), **16-1**(ST-36);*

*Second therapeutic session - **1-1**(GV-24), **3-6**(GB-20), **4-3**(TE-20), **12-4**(PC-6), **15-1**(SP-6), **15-2**(KI-7);*

*Third therapeutic session - **4-4**(TE-19), **7-3**(CV-8), **10-5**(LI-11), **11-2**(TE-5), **15-8**(KI-1), **16-5**(LR-2);*

*Fourth therapeutic session - **3-1**(GV-20), **7-6**(CV-4), **8-1**(GV-14), **11-4**(LI-4), **12-10**(PC-7), **16-1**(ST-36).*

On the following 4 days hold therapeutic session twice daily: on the morning and evening.

*On the morning - **3-1**(GV-20), **3-6**(GB-20), **5-5**(CV-17), **12-8**(HT-6), **12-10**(PC-7);*

*On the evening - **4-3**(TE-20) right and left sides, **12-4**(PC-6), **15-1**(SP-6), **15-8**(KI-1), **16-5**(LR-2).*

Expose for 5 minutes for each area. It is recommended to take more fluid drinks (milk, juice), multivitamins, to walk outside. From the second day patient may start physical exercise.

2.7. Drug & substance dependencies

The clinical symptoms and signs of mild narcotic intoxication include changes in mood, with feelings of euphoria; drowsiness; nausea with occasional emesis; needle tracks; and miosis. Overdosage causes respiratory depression, peripheral vasodilation, pinpoint pupils, pulmonary edema, coma, and death.

Dependency is a major concern when continued use of narcotics occurs, though withdrawal causes only moderate morbidity (similar in severity to a bout of “flu”). Addicts sometimes consider themselves more addicted than they really are and may not require a withdrawal program.

Treatment of drug abuse consists of 4 steps.

First step includes arresting of withdrawal syndrome, psychoses, pathologic compulsive craving to drugs. This step usually lasts 5-10 days.

Second step is the restoration of impaired homeostasis of patient’s organism after withdrawal; the management of depression and sleep disorders. The duration of treatment on the second step considers 3-6 weeks.

Third step is directed to the normalization of psychologic and physical status of patient; the management of asthenia, flabbiness, apathy, affective fluctuations. Third step usually considers 1 week to 4 months of treatment.

Fourth step is rehabilitation. It lasts usually 6 months.

Taking into considerations that informational radiowave therapy has disintoxicational, general beneficial and anxiolytic effects, improves sleep, it is rational to use informational radiowave therapy in the management of withdrawal syndrome in drug abusers.

Recommended zones for electromagnetic exposure:

On the morning: 3-1(GV-20), 4-3(TE-20) right and left sides, 12-8(HT-6), 15-1(SP-6) right side, 15-8(KI-1), 5-5(CV-17).

On the evening: 3-6(GB-20), 1-1(GV-24), 12-4(PC-6), 16-5(LR-2), 15-2(KI-7), 16-1(ST-36).

To relief withdrawal syndrome it is recommended to combine informational radiowave therapy with other methods on first step of the management. Make therapeutic session twice daily – on the morning and on the evening. Expose for 5 minutes each area until compulsive craving to drug stops.

After finishing first step it necessary to start second step without any break or delay.

Recommended zones for electromagnetic exposure:

First day: 7-6(CV-4), 8-1(GV-14), 12-8(HT-6), 12-14(PC-9), 15-1(SP-6), 16-1(ST-36), 16-5(LR-2);

Second day: 5-5(CV-17), 7-3(CV-8), 3-1(GV-20), 11-4(LI-4), 12-2(PC-3), 12-10(PC-7), 12-9(HT-7).

Make therapeutic session once daily on the second step. Expose for 5 minutes each area. The duration of treatment is 3-6 weeks. The primary goal is reduce apathy, anxiety, and fears.

Informational radiowave therapy on third step is so effective that other methods may not require.

If it is necessary manage on the third step may do on schedule of second step. Use the same recommended zones for electromagnetic exposure. The therapy is 10 days every month for 4 months.

To achieve more effects is necessary to follow on schedule of fourth step. It may include psychologic, social, medical and behavioral treatment.

CHAPTER 3. Nervous diseases

3.1. Headache

Headache is such a common complaint and can occur for so many different reasons that its proper evaluation may be difficult. Although underlying structural lesions are not present in most patients presenting with headache, it is nevertheless important to bear this possibility in mind. About one-third of patients with brain tumors, for example, present with a primary complaint of headache.

The intensity, quality, and site of pain – and especially the duration of the headache and the presence of associated neurologic symptoms – may provide clues to the underlying cause.

Chronic headaches are commonly due to migraine, tension, or depression, but they may be related to intracranial lesions, head injury, cervical spondylosis, dental or ocular disease, temporomandibular joint dysfunction, sinusitis, hypertension, and a wide variety of general medical disorders. Depending on the initial clinical impression, the need for such investigations as CT scan or MRI of the head, electroencephalography, and lumbar puncture must be assessed on an individual basis.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **4-3**(TE-20), **3-6**(GB-20),
3-5(GV-16), **11-4**(LI-4), **16-1**(ST-36),
12-4(PC-6).

Use all the recommended zones. Expose for 5 minutes each zone. It is recommended to hold therapeutic session when patient has headache 2-3 times a day until complete recovery.

3.2. Tension headache

Patients frequently complain of poor concentration and other vague nonspecific symptoms, in addition to constant daily headaches that are often vise-like or tight in quality and may be exacerbated by emotional stress, fatigue, noise, or glare. The headaches are usually generalized, may be most intense about the neck or back of the head, and are not associated with focal neurologic symptoms.

Technique to induce relaxation are also useful and include massage, hot baths, and biofeedback.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **1-2**(GB-14), **11-4**(LI-4),
16-1(ST-36), **14-1**(BL-40), **7-2**(ST-25),
15-1(SP-6).

Use 6 zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 3-5 days.

3.3. Depression headache

Depression headaches are frequently worse on arising in the morning and may be accompanied by other symptoms of depression.

Recommended zones for electromagnetic exposure: **4-7**(TE-17), **10-5**(LI-11), **11-4**(LI-4),
12-5(LU-7), **16-1**(ST-36), **12-4**(PC-6),
15-1(SP-6).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is usually recommended for 10 days then break for 2 weeks and again treatment and so for 2 months.

3.4. Migraine

Classic migrainous headache is a lateralized throbbing headache that occurs episodically following its onset in adolescence or early adult life. Migrainous headaches may be lateralized or generalized, may be dull or throbbing, and are sometimes associated with anorexia, nausea, vomiting, photophobia, phonophobia, and blurring of vision. They usually build up gradually and may last for several hours or longer. They have been related to dilation and excessive pulsation of branches of the external carotid artery.

Attacks may be triggered by emotional or physical stress, lack or excess of sleep, missed meals, specific foods (eg, chocolate), alcoholic beverages, menstruation, or use of oral contraceptives.

Application of informational radiowave therapy gave good results. The therapy prevents the migrainous attack and development of complications.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **4-3**(TE-20), **3-6**(GB-20),
3-5(GV-16), **12-7**(HT-5), **11-4**(LI-4),
16-1(ST-36), **12-4**(PC-6), **15-1**(SP-6).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes for each zone. Change the zone during the therapy. The treatment course is 10 days. Repeat therapy every month until complete recovery.

3.5. Cluster headache (Migrainous Neuralgia)

Cluster headache affects predominantly middle-aged men. Its cause is unclear but may relate to vascular headache disorder or a disturbance of serotonergic mechanisms. There is often no family history of headache or migraine. Episodes of severe unilateral periorbital pain occur daily for several weeks and are often accompanied by one or more of the following: ipsilateral nasal congestion, rhinorrhea, lacrimation, redness of the eye, and Horner's syndrome. Spontaneous remission then occurs, and the patient remains well for weeks or months before another bout of closely spaced attacks occurs. During a bout, many patients report that alcohol triggers an attack; others report that stress, glare, or ingestion of specific foods occasionally precipitates attacks.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **4-7**(TE-17), **4-3**(TE-20),
3-6(GB-20), **3-5**(GV-16), **11-4**(LI-4),
16-1(ST-36), **12-4**(PC-6), **15-1**(SP-6).

Use 6 zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. Repeat therapy each month until complete recovery.

3.6. Giant cell (temporal or cranial) arteritis

The superficial temporal, vertebral, ophthalmic, and posterior ciliary arteries are often the most severely affected pathologically. Most patients are elderly. The major symptom is headache, often associated with or preceded by myalgia, malaise, anorexia, weight loss, and other nonspecific complaints.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **4-7**(TE-17), **4-3**(TE-20),
4-1(GB-9), **4-6**(GB-2), **3-6**(GB-20),
12-4(PC-6), **11-4**(LI-4), **16-1**(ST-36),

15-1(SP-6).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. Repeat therapy each month until complete recovery.

3.7. Posttraumatic headache

A variety of nonspecific symptoms may follow closed head injury, regardless of whether consciousness is lost. Headache is often a conspicuous feature. Some authorities believe that psychologic factors may be important because there is no correlation of severity of the injury with neurologic signs.

The headache itself usually appears within a day or so following injury, and then gradually subsides. It is usually a constant dull ache, with superimposed throbbing that may be localized, lateralized, or generalized. It is sometimes accompanied by nausea, vomiting, or scintillating scotomas.

Recommended zones for electromagnetic exposure: 3-1(GV-20), ***4-3***(TE-20), ***3-6***(GB-20), ***3-5***(GV-16), ***11-4***(LI-4), ***16-1***(ST-36), ***12-4***(PC-6).

Use all the recommended zones. Expose for 5 minutes each zone. It is recommended to hold therapeutic session when patient has headache 2-3 times a day until complete recovery.

3.8. Cough headache

Severe head pain may be produced by coughing (and by straining, sneezing, and laughing) but, fortunately, usually lasts for only a few minutes or less. The pathophysiologic basis of the complaint is not known, and often there is no underlying structural lesion.

Recommended zones for electromagnetic exposure: 3-1(GV-20), ***4-3***(TE-20), ***3-6***(GB-20), ***3-5***(GV-16), ***11-4***(LI-4), ***16-1***(ST-36), ***12-4***(PC-6), ***12-1***(LU-5), ***5-4***(LU-2).

Use all the recommended zones. Expose for 5 minutes each zone. It is recommended to hold therapeutic session when patient has headache 2-3 times a day until complete recovery.

3.9. Trigeminal neuralgia

Trigeminal neuralgia is most common in middle and later life. It affects women more frequently than men. The disorder is characterized by momentary episodes of sudden lancinating facial pain that commonly arises near one side of the mouth and then shoots towards the ear, eye, or nostril on that side. The pain may be triggered or precipitated by such factors as touch, movement, drafts, and eating.

Recommended zones for electromagnetic exposure

First day: 1-2(GB-14), ***1-3***(BL-2), ***2-2***(ST-3), ***1-5***(TE-23), ***1-7***(GB-1);

Second day: 1-9(ST-2), ***3-1***(GV-20), ***11-4***(LI-4), ***1-8***(LI-20), ***1-10***(SI-18);

Third day: 4-9(ST-6), ***10-5***(LI-11), ***4-7***(TE-17), ***4-10***(ST-5), ***4-6***(GB-2), ***2-3***(CV-24).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. Change the zones for first, second and third days. The treatment course is 8-10 days, in 2-3 weeks of break repeat the treatment course.

3.10. Atypical facial pain

Facial pain without the typical features of trigeminal neuralgia is generally a constant, often burning pain that may have a restricted distribution at its onset but soon spreads to the rest of the face on the affected side and sometimes involves the other side, the neck, or the back of head as well. The disorder is especially common in middle-aged women, many of them emotionally depressed, but it is not clear whether depression is the cause of or a reaction to the pain.

Recommended zones for electromagnetic exposure:

Upper 1/3 of head - 1-2(GB-14), **1-3**(BL-2), **4-7**(TE-17), **4-9**(ST-6), **1-5**(TE-23), **10-5**(LI-11),
11-4(LI-4), **10-6**(LI-10), **12-5**(LU-7);

Middle 1/3 of head - 1-9(ST-2), **1-8**(LI-20), **1-10**(SI-18), **10-5**(LI-11), **11-4**(LI-4), **10-6**(LI-10),
12-5(LU-7);

Lower 1/3 of head - 4-6(GB-2), **4-10**(ST-5), **4-9**(ST-6), **2-3**(CV-24), **10-5**(LI-11), **11-4**(LI-4),
10-6(LI-10), **12-5**(LU-7).

Use 5-6 zones for one therapeutic session. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. Repeat the therapy with break in 2 weeks for 2 months.

3.11. Glossopharyngeal neuralgia

Glossopharyngeal neuralgia is an uncommon disorder in which pain similar in quality to that in trigeminal neuralgia occurs in the throat, about the tonsillar fossa, and sometimes deep in the ear and the back of the tongue. The pain may be precipitated by swallowing, chewing, talking, or yawning and is sometimes accompanied by syncope.

Recommended zones for electromagnetic exposure: 3-6(GB-20), **4-7**(TE-17), **4-9**(ST-6),
3-1(GV-20), **1-5**(TE-23), **2-4**(CV-23).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 8-10 days, repeat the therapy in 2-3 weeks.

3.12. Postherpetic neuralgia

Herpes zoster (shingles) is due to infection of the nervous system by varicella-zoster virus. About 10% of patients who develop shingles suffer from postherpetic neuralgia. This complication seems especially likely to occur in the elderly and when the first division of the trigeminal nerve is affected.

Recommended zones for electromagnetic exposure: 1-3(BL-2), **2-2**(ST-3), **1-5**(TE-23),
1-7(GB-1), **3-1**(GV-20), **4-7**(TE-17).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each zone. The treatment course is 8-10 days, repeat the therapy in 2-3 weeks.

3.13. Facial pain due to other causes

Facial pain may be caused by temporomandibular joint dysfunction in patients with malocclusion, abnormal bite, or faulty dentures. There may be tenderness of the masticatory muscles, and an association between pain onset and jaw movement is sometimes noted. Treatment consists of correction of the underlying problem.

Recommended zones for electromagnetic exposure: 4-7(TE-17), 1-7(GB-1), 1-8(LI-20),
4-9(ST-6), 1-3(BL-2), 2-2(ST-3), 1-5(TE-23).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each zone. The treatment course is 8-10 days, repeat the therapy in 2-3 weeks.

3.14. Bell's palsy (Facial neuritis)

Bell's palsy is an idiopathic facial paresis of lower motor neuron type that has been attributed to an inflammatory reaction involving the facial nerve near the stylomastoid foramen or in the bony facial canal. A relationship of Bell's palsy to reactivation of herpes simplex virus has recently been suggested.

The clinical features of Bell's palsy are characteristic. The facial paresis generally comes on abruptly, but it may worsen over the following day or so. Pain about the ear precedes or accompanies the weakness. There may be ipsilateral restriction of eye closure and difficulty with eating and fine facial movements. A disturbance of taste is common, owing to involvement of chorda tympani fibers, and hyperacusis due to involvement of fibers to the stapedius occurs occasionally.

Recommended zones for electromagnetic exposure (according affected branches):

first branch - 1-2(GB-14), 1-3(BL-2), 4-7(TE-17), 4-9(ST-6), 1-5(TE-23), 10-5(LI-11), 11-4(LI-4),
10-6(LI-10), 12-5(LU-7);

second branch - 1-9(ST-2), 1-8(LI-20), 1-10(SI-18), 10-5(LI-11), 11-4(LI-4), 10-6(LI-10),
12-5(LU-7);

third branch - 4-6(GB-2), 4-10(ST-5), 4-9(ST-6), 2-3(CV-24), 10-5(LI-11), 11-4(LI-4),
10-6(LI-10), 12-5(LU-7).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each zone. Change the zone during the treatment course. Change the zones during the therapy. The treatment course is 10 days. Repeat the therapy with break in 2 weeks for 2 months.

3.15. Bacterial meningitis

Bacterial meningitis is infectious disease of the membranes of the brain characterized fever, headache, photophobia, vomiting, nuchal rigidity, seizures, coma, and purpuric eruption. Patient in acute stage should be hospitalized for intensive complex care. Informational radiowave therapy is effective for rehabilitation and prevention of complications.

Recommended zones for electromagnetic exposure: 3-5(GV-16), 3-6(GB-20), 4-4(TE-19),
8-1(GV-14), 10-5(LI-11), 1-6(ST-1),
1-2(GB-14), 4-1(GB-9).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10-12 days. In acute stage it is recommended to hold therapeutic session twice daily, then continue by one session daily. Repeat the same therapy in 2 weeks.

3.16. Encephalitis

It is inflammatory-allergic, infectious, allergic or toxic brain disease. Symptoms include severe headache, abnormal behavior, disturbances of sensorium and seizures.

Informational radiowave therapy is indicated to decrease cerebral edema, to prevent other complications (memory impairment, etc).

Recommended zones for electromagnetic exposure: 3-5(GV-16), 3-6(GB-20), 3-1(GV-20), 12-10(PC-7), 2-2(ST-3), 11-4(LI-4).

It is necessary consultation of specialists when complications are developed. Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 10-12 days. Repeat the therapy every month during 6 months.

3.17. Epilepsy

The term epilepsy denotes any disorder characterized by recurrent seizures. A seizure is a transient disturbance of cerebral function due to an abnormal paroxysmal neuronal discharge in the brain and usually associated with some alteration of consciousness. The clinical manifestations of the attack may vary from complex abnormalities of behavior including generalized or focal convulsions to momentary spells of impaired consciousness. These clinical states have been subjected to a variety of classifications, none universally accepted to date and, accordingly, the terminologies used to describe the different types of attacks remain purely descriptive and nonstandardized; they are variously based on 1) the clinical manifestations of the seizure (motor, sensory, reflex, psychic or vegetative), 2) the pathologic substrate (hereditary, inflammatory, degenerative, neoplastic, traumatic, or cryptogenic), 3) the location of the epileptogenic lesion (rolandic, temporal, diencephalic regions), and 4) the time of life at which the attacks occur (nocturnal, diurnal, menstrual).

Treatment includes anticonvulsant drugs in combination with informational radiowave therapy. Informational radiowave therapy restores the capillaries of the brain cells, decrease the high irritability of nervous system, has the spasmolytic effects, normalize the metabolism, reduce the toxic effects of medications.

Informational radiowave therapy may be applied only when patient doesn't have attacks.

Recommended zones for electromagnetic exposure: 9-2(GV-4), 3-5(GV-16), 8-3(GB-21), 10-4(SI-8), 3-1(GV-20), 12-2(PC-3), 15-8(KI-1), 3-6(GB-20), 12-9(HT-7), 16-1(ST-36), 12-4(PC-6), 10-6(LI-10).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. Repeat the treatment course in 4 weeks. The therapy is long term.

3.18. Transient ischemic attacks

Transient ischemic attacks are characterized by focal ischemic cerebral neurologic deficits that last for less than 24 hours (usually less than 1-2 hours). About 30% of patients with stroke have a history of transient ischemic attacks, and proper treatment of the attacks is an important means of prevention. The incidence of stroke does not relate to either the number or the duration of individual attack but is increased in patients with hypertension or diabetes.

Onset is abrupt and without warning, and recovery usually occurs rapidly, often within a few minutes. If the ischemia is in the carotid territory, common symptoms are weakness and heaviness of the contralateral arm, leg, or face, singly or in any combination. Numbness or paresthesias may also occur either as the sole manifestation of the attack or in combination with the motor deficit. There may be slowness of movement, dysphasia, or monocular visual loss in the eye contralateral to affected limbs.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 3-6(GB-20), 1-9(ST-2),

16-1(ST-36), **15-1**(SP-6), **10-5**(LI-11),
12-2(PC-3), **9-10**(GB-30), **14-1**(BL-40),
13-1(GB-34), **13-3**(BL-60).

Use 6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It's recommended to repeat the therapy in 2 weeks during 6 months. The therapy is long term combined with remedial exercises and massage.

3.19. Stroke

Acute neurologic deficits resulting from circulatory impairment that resolve within 24 hours are called transient ischemic attacks (TIAs); most TIAs last only 15-20 minutes. In contrast, a stroke involves irreversible brain damage, the type and severity of symptoms depending on the location and extent of brain tissue whose circulation has been compromised. The outcome of a stroke varies from minimal impairment to rapid onset of coma followed quickly by death. Stroke ranks third as a cause of death in adults in the U.S., after ischemic heart disease and cancer.

Risk factors for stroke include hypertension, valvular heart disease, atrial fibrillation, hyperlipidemia, diabetes mellitus, cigarette smoking, and a family history of stroke.

In addition, recent studies have shown that elevation of plasma homocysteine, low circulating levels of folic acid and pyridoxine (vitamin B₆), periodontal disease, and chronic bronchitis are all independent risk factors.

Ischemic stroke, which accounts for about 85% of all strokes, is generally caused by atherothrombosis or embolism of a major cerebral artery. Less common causes of ischemic stroke include nonatheromatous vascular disease and coagulation disorders.

Hemorrhagic stroke, which makes up the other 15%.

The diagnostic evaluation of the patient with stroke includes history, physical examination, blood count, blood chemistries, coagulation profile, electrocardiogram, and imaging studies. While cranial CT is the procedure of choice to identify subarachnoid hemorrhage, MRI is a more sensitive indicator of parenchymal hemorrhage as well as of ischemia and infarction.

Early and aggressive treatment is crucial in limiting damage to brain tissue and achieving an optimal outcome.

It is recommended to do therapy in neurologic department. Informational radiowave therapy may be applied in any stage of rehabilitation. Informational radiowave therapy in early stage leads to regress of paresis, prevents development of complications (pressure bedsores, contractures and etc).

Recommended zones for electromagnetic exposure in acute stage:

3-1(GV-20), **1-2**(GB-14), **11-4**(LI-4), **16-1**(ST-36), **3-5**(GV-16), **2-3**(CV-24), **14-1**(BL-40),
7-2(ST-25), **15-1**(SP-6), **18-4**(SP-9), **7-6**(CV4), **9-6**(BL-25).

Use 6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 15 days.

For residual effects of stroke informational radiowave therapy is applied to prevent trophic changes (swelling on the paralyzed extremities, bedsores, contractures).

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **2-3**(CV-24), **1-9**(ST-2),
16-1(ST-36), **15-1**(SP-6), **10-5**(LI-11),
12-2(PC-3), **9-10**(GB-30), **14-1**(BL-40),
13-1(GB-34), **13-3**(BL-60), **13-4**(BL-62).

Use 6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It is recommended to repeat therapy in 2 weeks during 6 months. The treatment is long-term in combination with remedial exercises and massage.

3.20. Pseudotumor cerebri (Benign Intracranial Hypertension)

Symptoms of pseudotumor cerebri consist of headache, diplopia, and other visual disturbances due to papilledema and abducens nerve dysfunction.

There are many causes of pseudotumor cerebri. Thrombosis of the transverse venous sinus as a noninfectious complication of otitis media or chronic mastoiditis is one cause, and sagittal sinus thrombosis may lead to a clinically similar picture. Other causes include chronic pulmonary disease, endocrine disturbance such as hypoparathyroidism or Addison's disease, vitamin A toxicity, and the use of tetracycline or oral contraceptives.

Untreated pseudotumor cerebri leads to secondary optic atrophy and permanent visual loss.

Repeated lumbar puncture to lower the intracranial pressure by removal of cerebrospinal fluid in combination with informational radiowave therapy and pharmacologic approaches are very effective treatment. Treatment is monitored by checking visual acuity and visual fields, fundoscopic appearance, and pressure of the cerebrospinal fluid.

Recommended zones for electromagnetic exposure: 3-5(GV-16), **3-6**(GB-20), **3-1**(GV-20),
12-10(PC-7), **2-2**(ST-3), **11-4**(LI-4).

Patient needs the consultation of specialists if complications develop. Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. Repeat the therapy every month during 6 months.

3.21. Benign essential (familial) tremor

The cause of benign essential tremor is uncertain, but it is sometimes inherited in an autosomal dominant manner. Tremor may begin at any age and is enhanced by emotional stress. The tremor usually involves one or both hands, the head, the hands and head, while the legs tend to be spared. Examination reveals no other abnormalities. Ingestion of a small quantity of alcohol commonly provides remarkable but short-lived relief by an unknown mechanism.

Speech may also be affected if the laryngeal muscles are involved.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **3-5**(GV-16), **3-6**(GB-20),
12-10(PC-7), **10-5**(LI-11), **12-2**(PC-3),
16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. Repeat the therapy every month. The therapy is long term.

3.22. Parkinsonism

Parkinsonism is a relatively common disorder that occurs in all ethnic groups, with an approximately equal sex distribution. The most common variety, idiopathic Parkinson's disease (paralysis agitans), begins most often between 45 and 65 years of age.

Postencephalitic parkinsonism is becoming increasingly more rare. Exposure to certain toxins (eg, manganese dust, carbon disulfide) and severe carbon monoxide poisoning may lead to parkinsonism. Typical parkinsonism has occurred in individuals who have taken 1-methyl-4-phenyl-1,2,5,6-

tetrahydropyridine for recreational purpose. This compound is converted in the body to a neurotoxin that selectively destroys dopaminergic neurons in the substantia nigra. Reversible parkinsonism may develop in patients receiving neuroleptic drugs and has also been caused by reserpine and metoclopramide.

Tremor, rigidity, bradykinesia, and postural instability are the cardinal features of parkinsonism and may be present in any combination. Informational radiowave therapy may be effective in many cases. The treatment is symptomatic. The combination informational radiowave therapy with pharmacologic agents decreases the extrapyramidal tonicity, muscular rigidity, improves general health status.

Recommended zones for electromagnetic exposure: 1-2(GB-14), 3-4(GV-17), 11-2(TE-5), 3-1(GV-20), 13-1(GB-34), 4-8(GB-12), 8-7(BL-15), 10-2(LI-15), 12-4 (PC-6), 15-3(KI-3), 16-1(ST-36), 10-5(LI-11).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 7-10 days. Repeat the therapy every month for 6 months, then make one treatment course of 3 months. The treatment is long-term.

3.23. Huntington's disease

Huntington's disease is characterized by chorea and dementia. It is inherited in an autosomal dominant manner and occurs throughout the world, in all ethnic groups. Symptoms do not usually develop until after 30 years of age, by which time the patient has usually had children, and so the disease continues from one generation to the next. The cause of Huntington's disease is unknown. The initial symptoms may consist of either abnormal movements or intellectual changes. The earliest mental changes are often behavioral, with irritability, moodiness, antisocial behavior, or a psychiatric disturbance, but a more obvious dementia subsequently develops.

There is no cure for Huntington's disease, progression cannot be halted, and treatment is purely symptomatic.

There is no any effective medication for it. Informational radiowave therapy reduces hyperkinesia and hyperexcitability.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 3-6(GB-20), 3-3(BL-8), 12-14(PC-9), 4-4(TE-19), 8-4(SI-14), 10-6(LI-10), 16-1(ST-36), 11-4(LI-4).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. Repeat the therapy every month for 4 months.

3.24. Wilson disease

Metabolic disorder, abnormal movement and posture may occur with or without coexisting signs of liver involvement. The major physiologic aberration in Wilson's disease is excessive absorption of copper from the small intestine and decreased excretion of copper by the liver, resulting in increased tissue deposition, especially in the liver, brain, cornea, and kidney. Serum ceruloplasmin, the plasma copper-carrying protein, is low. Urinary excretion of copper is high.

Wilson's disease tends to present as liver disease in adolescents and neuropsychiatric disease in young adults, but there is great variability.

The neurologic manifestations are related to basal ganglia dysfunction and are characterized by rigidity or parkinsonian tremor. There are no usually symptoms of hepatic involvement. The treatment is complex: anticonvulsants in combination with informational radiowave therapy.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **3-6**(GB-20), **16-5**(LR-2),
4-3(TE-20), **10-5**(LI-11), **16-1**(ST-36),
10-4(SI-8).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each zone. The treatment course is 10 days. It is recommended to repeat the therapy in 3 weeks during 4 months. Then continue treatment once in 3 months. The therapy is long-term.

3.25. Multiple sclerosis

This common neurologic disorder of unknown cause has its greatest incidence in young adults. Epidemiologic studies indicate that multiple sclerosis is much more common in persons of western European lineage who live in temperate zones. There may be a familial incidence of the disease, since affected relatives are sometimes reported. The strong association between multiple sclerosis and specific HLA antigens (HLA-DR2) provides support for a theory of genetic predisposition. Many believe that the disease has an immunologic basis.

The common initial presentation is weakness, numbness, tingling, or unsteadiness in a limb; spastic paraparesis; retrobulbar neuritis; diplopia; disequilibrium; or a sphincter disturbance such as urinary urgency or hesitancy.

The treatment is complex: informational radiowave therapy with medications. Informational radiowave therapy reduces muscle tone, increases power in extremities, decreases cerebro-cranial symptoms and improves psychoemotional status.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **3-6**(GB-20), **12-4**(PC-6).

Extra points

For upper extremity involvement: 10-3(TE-10), *3-7*(BL-10), *8-2*(BL-11),

10-5(LI-11), **11-4**(LI-4);

for paralysis of lower extremity: 16-1(ST-36), *15-1*(SP-6), *14-1*(BL-40), **13-3**(BL-60),

9-10(GB-30), **9-5**(GV-3);

for speech disturbances: 4-10(ST-5), **9-6**(BL-25), **12-7**(HT-5), **12-2**(PC-3).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. It is recommended to repeat the therapy in 2 weeks for 4 months. Informational radiowave therapy is necessary to maintain constantly.

3.26. Vitamin E deficiency (Familial Friedreich's ataxia)

Vitamin E deficiency may produce a disorder somewhat similar to Friedreich's ataxia. There is spinocerebellar degeneration involving particularly the posterior columns of the spinal cord and leading to limb ataxia, sensory loss, absent tendon reflexes, slurring of speech, and in some cases, pigmentary retinal degeneration. The disorder may occur as a consequence of malabsorption or on a hereditary basis. Treatment is with alpha-tocopheryl acetate.

Informational radiowave therapy is effective and has stimulating, strengthening, and improving movement function actions.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **3-6**(GB-20), **9-11**(BL-36),
14-1(BL-40), **9-5**(GV-3), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each zone. The treatment course is 10 days. It is recommended to repeat the therapy in a month. The therapy is long-term.

3.27. Brachial plexus neuropathy

Brachial plexus neuropathy may be idiopathic, sometimes occurring in relationship to a number of different nonspecific illness or factors. In other instances, brachial plexus lesions follow trauma or result from congenital anomalies, neoplastic involvement, or injury by various physical agents. In rare instances, the disorder occurs on a familial basis. It is characterized by severe pain about the shoulder; followed within a few days by weakness, reflex changes, and sensory disturbances. Symptoms and signs are usually unilateral but may be bilateral.

Recommended zones for electromagnetic exposure: 3-6(GB-20), **8-2**(BL-11), **8-1**(GV-14),
8-4(SI-14), **10-5**(LI-11), **11-2**(TE-5).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat the therapy in 2 weeks.

3.28. Radial nerve lesions

The radial nerve is particularly liable to compression or injury in the axilla (eg, by crutches or by pressure when the arm hangs over the back of a chair). This leads to weakness or paralysis of all the muscles supplied by the nerve, including the triceps. Sensory changes may also occur but are often surprisingly inconspicuous, being marked only in a small area on the back of the hand between the thumb and index finger. Injuries to the radial nerve in the spiral groove occur characteristically during deep sleep, as in intoxicated individuals (Saturday night palsy), and there is then sparing of the triceps muscle, which is supplied more proximally. The nerve also be injured at or above the elbow; its purely motor posterior interosseous branch, supplying the extensors of the wrist and fingers, may be involved immediately below the elbow, but then there is sparing of the extensor carpi radialis longus, so that the wrist can still be extended. The superficial radial nerve may be compressed by handcuffs or a tight watch strap.

Recommended zones for electromagnetic exposure: 3-7(BL-10), **10-3**(TE-10), **10-4**(SI-8),
10-5(LI-11), **11-4**(LI-4).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat the therapy in 2 weeks.

3.29. Ulnar nerve lesions

The causes may be congenital, degenerative, traumatic or infectious. The traumas are more likely to occur in the elbow region as the nerve runs behind the medial epicondyle and descends into the cubital tunnel. A severe lesion causes sensory changes in the medial 1½ digits and along the medial border of the hand. There is weakness of the ulnar-innervated muscles in the forearm and hand.

Recommended zones for electromagnetic exposure: 12-3(HT-3), **8-4**(SI-14), **10-4**(SI-8), **11-5**(SI-2).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat the therapy in 2 weeks.

3.30. Median nerve lesions

The causes include occupational hazard, acute or chronic trauma, infection.

Symptoms include burning pain, sometimes causalgia sometimes in fingers. There are disturbances of flexion of hand, I, II, and III fingers of hand. The symptom called “monkey hand” appears. There are sensory disturbances on palmar and dorsal sides of distal phalanges of I-III and partly IV fingers of hand, vegetovascular disturbances, skin atrophy and nail brittleness.

Recommended zones for electromagnetic exposure: 3-7(BL-10), **8-2**(BL-11), **8-4**(SI-14), **11-2**(TE-5).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat therapy in 2 weeks.

3.31. Radiculitis

Radiculitis is inflammation of the spinal nerve roots and nerves. The causes include complications of osteoarthritis of spinal cord, disk herniation, and trauma. Symptoms are back pain radiating from the back to the territory of the affected root, being exacerbated by coughing, straining, or stretching of the nerve fibers, eg, by straight leg raising. There are thoracocervical and lumbosacral radiculitis.

Recommended zones for electromagnetic exposure: 16-1(ST-36), **16-3**(ST-41), **11-4**(LI-4),
13-5(GB-40), **14-1**(BL-40), **13-3**(BL-60),
13-4(BL-62), **13-7**(BL-67), **12-5**(LU-7),
10-5(LI-11), **12-4**(PC-6), **11-2**(TE-5).

Extra points:

For thoracocervical radiculitis: 11-1(TE-6), *10-5*(LI-11), *10-4*(SI-8), *8-3*(GB-21), *3-6*(GB-20),

For back pain: 8-1(GV-14), *8-6*(BL-43), *3-7*(BL-10), *8-2*(BL-11);

Lumbosacral radiculitis: 9-6(BL-25), *9-7*(BL-31), *9-11*(BL-36), *9-9*(GV-2), *9-5*(GV-3), *9-2*(GV-4);

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10-12 days. Since disorder is often chronic it is recommended to repeat the therapy with break in 3 weeks during 4 months. It is recommended to combine informational radiowave therapy with physical exercises and massage.

3.32. Lumbosacral plexus lesions

A lumbosacral plexus lesion may develop in association with diseases such as diabetes, cancer, or bleeding disorders or in relation to injury. It occasionally occurs as an isolated phenomenon similar to idiopathic brachial plexopathy, and pain and weakness then tend to be more conspicuous than sensory symptoms.

Recommended zones for electromagnetic exposure: 3-7(BL-10), **3-6**(GB-20), **12-3**(HT-3),

12-9(HT-7), **12-4**(PC-6), **12-7**(HT-5),
11-4(LI-4).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat the therapy in 2 weeks.

3.33. Lumbosacral radiculitis

Lumbosacral radiculitis is a inflammation of sciatic nerve. The causes include complication of osteoarthritis, trauma and disk herniation.

Recommended zones for electromagnetic exposure: **9-10**(GB-30), **14-1**(BL-40), **13-1**(GB-34),
13-3(BL-60), **13-4**(BL-62).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. In acute stage hold therapeutic session twice daily. Repeat the therapy with break in 2 weeks during 2 months.

3.34. Fibular neuritis

Fibular neuritis is the most common nervous diseases of low extremity even injury affects general trunk of sciatic nerve. The cause of that disorder is trauma, intoxication of lead, arsenic, alcohol, and infection. Patient cannot stand on the heels, extend foot since it droops. Patient has so called prancing gait with high steppage. There is sensory disturbances on anterior surface of lower leg and dorsal side of the foot.

Recommended zones for electromagnetic exposure: **9-1**(BL-21), **16-7**(ST-44), **16-1**(ST-36),
16-6(LR-1), **13-1**(GB-34).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat the therapy in 2 weeks.

3.35. Tibial neuritis

The cause of that disorder is infection, trauma, and intoxication of arsenic, lead and alcohol. Symptoms are following: the foot is extended and patient cannot flex it on ankle joint. There is sensory disturbances of posterior surface of lower leg and sole.

Recommended zones for electromagnetic exposure: **9-1**(BL-21), **14-1**(BL-40), **13-3**(BL-60),
15-8(KI-1), **16-7**(ST-44).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat the therapy in 2 weeks.

3.36. Lateral cutaneous neuritis

The cause is trauma by edge of iliac bone, weight loss, long bandage wearing or body belt wearing, inflammatory diseases. Symptoms include unpleasant sensations of lateral side of hip such as tingling, numbness, burning aggravated by touching and moving of extremity.

Recommended zones for electromagnetic exposure: **16-5**(LR-2), **17-2**(ST-32), **9-10**(GB-30),
18-5(SP-10), **9-1**(BL-21), **16-7**(ST-44).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. If it is necessary repeat the therapy in 2 weeks.

3.37. Peripheral neuropathies

Peripheral neuropathies can be categorized on the basis of the structure primarily affected. The predominant pathologic feature may be axonal degeneration (axonal or neuronal neuropathies) or paranodal or segmental demyelination. The distinction may be possible on the basis of neurophysiologic findings. Motor and sensory conduction velocity can be measured in accessible segments of peripheral nerves.

The major clinical findings are paresthesias, pain, and muscle tenderness.

Informational radiowave therapy is used to relieve pain, improve general health, and restore movement function.

Recommended zones for electromagnetic exposure:

For upper extremity involvement: **8-1**(GV-14), **8-2**(BL-11), **11-4**(LI-4), **10-5**(LI-11), **12-7**(HT-5),
12-4(PC-6), **12-5** (LU-7), **11-3**(TE-4), **10-4**(SI-8).

Use for one therapeutic session 5-6 zones daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. Repeat the therapy every 2 weeks for 3 months.

For lower extremity involvement: **16-1**(ST-36), **15-1**(SP-6), **13-2**(GB-39), **16-9**(GB43),
16-3(ST-41), **13-4**(BL-62).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. Repeat the therapy every 2 weeks for 3 months.

3.38. Muscular dystrophies

These inherited myopathic disorders are characterized by progressive muscle weakness and wasting. They are subdivided by mode of inheritance, age at onset, and clinical features.

In the Duchenne type, pseudohypertrophy of muscles frequently occurs at some stage; intellectual retardation is common; and there may be skeletal deformities, muscle contractures, and cardiac involvement.

The serum creatine kinase level is increased, and mildly increased also in limb-girdle dystrophy. Electromyography may help to confirm that weakness is myopathic rather than neurogenic.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **12-4**(PC-6), **3-6**(GB-20)

Extra points:

When skeletal muscles of upper extremity are affected: **8-2**(BL-11), **8-4**(SI-14),
10-2(LI-15), **10-1**(TE-14).

When skeletal muscles of lower extremity are affected: **18-5**(SP-10), **9-10**(GB-30),
13-1(GB-34), **16-1**(ST-36).

Use 5 recommended zones for one therapeutic session every day. Expose for 5 minutes each area. The treatment course is 10-12 days. It is recommended to repeat therapy every 2 weeks for 3 months.

3.39. Myotonic dystrophy

Myotonic dystrophy, a slowly progressive, dominantly inherited disorder, usually manifests itself in the third or fourth decade but occasionally appears early in childhood. The genetic defect has been localized to the long arm of chromosome 19. Myotonia leads to complaints of muscle stiffness and is evidenced by the marked delay that occurs before affected muscles can relax after a contraction. This can often be demonstrated clinically by delayed relaxation of the hand after sustained grip or by percussion of the belly of a muscle. In addition, there is weakness and wasting of the facial, sternocleidomastoid, and distal limb muscles. Associated clinical features include cataracts, frontal baldness, testicular atrophy, diabetes mellitus, cardiac abnormalities, and intellectual changes. Treatment includes vasoactive agents, nootropics, vitamins group B, and informational radiowave therapy.

Recommended zones for electromagnetic exposure (according to affected level):

Cervical level: **8-1**(GV-14), **8-2**(BL-11), **10-5**(LI-11), **16-1**(ST-36).

Lumbar level: **9-5**(GV-3), **9-4**(BL-52), **16-1**(ST-36), **14-3**(BL-57).

Extra points

For dysfunction of pelvic organs: **12-4**(PC-6), **12-12**(PC-8), **7-9**(CV-2), **7-8**(CV-3),
9-9(GV-2).

Zones for electromagnetic exposure are depend on localization of pathologic process. Use 5-6 recommended zones for one therapeutic session every day. Expose for 5 minutes each area. The treatment course is 10 days. It is recommended to repeat therapy every 4 weeks for 6 months.

3.40. Myotonia congenita

Myotonia congenita is commonly inherited as a dominant trait. The responsible gene may be on the long arm of chromosome 7. Generalized myotonia without weakness is usually present from birth, but symptoms may not appear until early childhood. Patients complain of muscle stiffness that enhanced by cold and inactivity and relieved by exercise. Muscle hypertrophy, at times pronounced, is also a feature. A recessive form with later onset is associated with slight weakness and atrophy of distal muscles. There is no any effective medication. Informational radiowave therapy effects on pathogenic factors produced muscular changes; it improves vegetative innervations of muscles, normalizes functions of spinal cord cells.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **12-4**(PC-6), **3-6**(GB-20)

Extra points

When skeletal muscles of shoulder and forearm are affected: **8-2**(BL-11), **8-4**(SI-14), **10-2**(LI-15),
10-1(TE-14).

When skeletal muscles of lower extremities are affected: **18-5**(SP-10), **9-10**(GB-30), **13-1**(GB-34),
16-1(ST-36).

Use 5 recommended zones for one therapeutic session every day. Expose for 5 minutes each area. The treatment course is 10-12 days. It is recommended to repeat therapy every 2 weeks for 3 months. It is necessary to maintain informational radiowave therapy constantly.

3.41. Vegetovascular dystonia

Functional vasomotor disturbances may occur on any level within central nervous system and peripheral nervous structures. There are two types of vegetovascular dystonias: hypertensive type is characterized by mild transient arising of blood pressure, emotional lability, sleep disturbances, fatigue, rapid pulse, sweating, dermatographism enhancement; hypotensive type is characterized by hypotension, weakness, dizziness, headache, fatigue, sleepiness, flabbiness, tendency to fainting, motion sickness.

Regional vegetovascular dystonia is due to local spasm or dilation of muscular arteries, asymmetry of arterial pressure, inconformity of skin temperature and perspiration, Raynaud's syndrome.

The management is directed to elimination of disorders of informational homeostasis of vegetative nervous system, restoration of the function of capillary system of vessels taking into consideration of type of vegetovascular dystonia, severity of symptoms and stage of disease.

Recommended zones for electromagnetic exposure: 3-6(GB-20), 3-1(GV-20), 16-5(LR-2), 15-3(KI-3), 7-6(CV-4), 12-9(HT-7), 12-10(PC-7), 16-1(ST-36).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. Repeat the therapy every month for 4 months. During the therapy it is recommended to correct the symptoms (arterial hypertension, hypotension).

3.42. Peripheral vegetative syndromes

Facial sympathalgias are unilateral characterized by burning, constricting pain (causalgia). It is accompanied by unilateral vegetative disorders (face edema, tearing, redness, rhinorrhea).

Facial sympathalgias include following syndromes:

Ciliary ganglion neuralgia (Sharlen's syndrome) is characterized by periorbital pain irradiating to the nostril on that side, keratitis or iritis, herpetic skin rashes on forehead and nostril.

Sphenopalatine ganglion neuralgia (Sluder's syndrome) is characterized by periorbital, jaw or tooth pain irradiating to the tongue, soft palate, ear, neck and scapulae.

The management consists of informational radiowave therapy and medications.

Recommended zones for electromagnetic exposure: 4-7(TE-17), 1-10(SI-18), 3-5(GV-16), 11-4(LI-4), 10-5(LI-11), 12-4(PC-6).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. Repeat the therapy every 3 weeks for 4 months.

3.43. Angiotrophoneurosis

This group of pathologic phenomenon affects distal parts foot and hands. Main symptoms are vegetovascular trophic disturbances also called vegetative polyneuritis. Raynaud's symptom group is most common among angiotrophoneurosis.

Medications don't give good result in treatment angiotrophoneurosis. Informational radiowave therapy effects on underlying cause of disease, normalizes vascular and capillary system disorders, has anti-inflammatory action.

Recommended zones for electromagnetic exposure: 3-6(GB-20), 3-7(BL-10), 8-2(BL-11), 8-7(BL-15), 12-10(PC-7), 12-14(PC-9), 12-4(PC-6), 12-6(LU-9), 10-5(LI-11), 16-1(ST-36), 15-1(SP-6), 8-6(BL-43).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. Repeat the therapy every 3 weeks for 6 months.

Chapter 4. Eye disease

4.1. Conjunctivitis

Conjunctivitis is the inflammation of the conjunctiva and is the most common eye disease. It may be acute or chronic. Most cases are due to bacterial (including gonococcal and chlamydial) or viral infection. Other causes include keratoconjunctivitis sicca, allergy, and chemical irritants. The mode of transmission of infectious conjunctivitis is usually direct contact via fingers, towels, handkerchiefs, etc, to the fellow eye or to other persons.

Recommended zones for electromagnetic exposure: **1-4**(BL-1) left and right side, **1-9**(ST-2) right and left side, **7-5**(KI-14), **16-1**(ST-36), **16-9**(GB-43).

Extra points

For acute conjunctivitis: **1-2**(GB14), **10-6**(LI-10);

For chronic conjunctivitis: **4-5**(SI-19), **16-5**(LR-2).

Use all the recommended zone for one therapeutic session daily. Expose for 5 minutes for each area. The treatment course is 7-10 days. In acute stage hold the procedure 2-3 times daily. In chronic conjunctivitis it is recommended to repeat treatment course monthly during the two months.

4.2. Blepharitis

Blepharitis is one of the most common eye diseases characterized by the inflammation of eyelid margins. The causes include local irritation chemical, physical, mechanical and bacterial factors due to avitaminosis, liver, stomach and intestines diseases, diabetes mellitus and other.

The most severe form of blepharitis is ulcerative blepharitis.

Symptoms are irritation, burning, and itching.

Informational radiowave therapy is effective as the monotherapy in combination with strict hygiene.

Recommended zones for electromagnetic exposure: **1-2**(GB-14), **1-4**(BL-1) right and left sides, **1-5**(TE-23), **1-7**(GB-1) right and left sides, **3-6**(GB-20), **10-5**(LI-11), **11-4**(LI-4).

Use all the recommended zones for one therapeutic session daily. Expose each area for 5 minutes. The duration of the treatment is 7-10 days. In acute stage it is recommended to do the therapeutic sessions 2-3 times in a day, and then continue with one session a day.

4.3. Hordeolum

Hordeolum is a common staphylococcal abscess that is characterized by a localized red, swollen, acutely tender area on the upper or lower lid. Internal hordeolum is a meibomian gland abscess that points onto the conjunctival surface of the lid; external hordeolum or sty is smaller and on the margin. The chief symptom is pain of an intensity directly related to the amount of swelling.

The applying of the informational radiowave therapy in early stages can prevent the progressing of the disease and recovery may follow in 1-2 days without any complications.

If abscess is formed informational radiowave therapy is also shorten the period of convalescence and the recovery follows in 5-7 days without any complication.

Recommended zones for electromagnetic exposure: **1-4**(BL-1) right and left sides, **1-7**(GB-1) right and left sides, **10-5**(LI-11), **11-4**(LI-4).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each zone, and also locally on lesion focus when eye is closed for 5 minutes. Hold the therapeutic session on the first day 2-3 times daily, and then continue with one therapeutic session a day until complete recovery.

4.4. Chalazion

Chalazion is a common granulomatous inflammation of a meibomian gland that may follow an internal hordeolum. It is characterized by a hard, nontender swelling on the upper or lower lid. The conjunctiva in the region of the chalazion is red and elevated.

Applying informational radiowave therapy promotes the disappearance of the chalazion in 2-4 weeks.

Recommended zones for electromagnetic exposure: **1-4**(BL-1) right and left sides, **1-6**(ST-1) right and left sides, **1-7**(GB-1) right and left sides, **16-1**(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area, and also locally on the closed eye for 10 minutes. The duration of the treatment is 12 days. After finishing the treatment the process of resolution goes on for 2-3 weeks more.

4.5. Keratitis

Keratitis is a inflammation of the cornea due to various causes such as bacterial, viral, fungal, mechanical and other causes. It is manifested with blurred and reduced vision. Keratitis is an important cause of ocular morbidity in adults. In severe cases patient needs hospitalization. The symptoms include pain, photophobia, tearing, blepharospasm; corneal hazyness accompanied with loss of transparency, brightness, smoothness and sensitivity. Corneal infiltrates may have different shape, size and depth. The inflammatory process may involve the other tunics of eyes – iris, ciliary body and sclera.

The management of acute purulent keratitis requires hospitalization in specialized department in combination with informational radiowave therapy. Early IRT accelerates the healing process, prevents the complications (corneal opacity, scar formation), improves the psycho-emotional status.

Recommended zones for electromagnetic exposure:

First day - **1-5**(TE-23), **1-7**(GB-1) right and left sides, **1-9**(ST-2) right and left sides, **7-5**(KI-14), **16-1**(ST-36);

Second day - **1-4**(BL-1) right and left sides, **1-5**(TE-23), **3-7**(BL-10), **11-4**(LI-4), **16-5**(LR-2), **16-9**(GB-43).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the treatment schedule during the treatment course. In the first 2-3 days it is recommended to perform therapeutic sessions twice daily. The duration of the treatment is 8-10 day.

4.6. Dacryocystitis

Dacryocystitis is infection of the lacrimal sac due to obstruction of the nasolacrimal system. It may be acute or chronic and occurs most often in infants and in persons over 40. It is usually unilateral. In acute Dacryocystitis, the usual infectious organisms are *S aureus* and β -hemolytic streptococci; in chronic Dacryocystitis, *Streptococcus pneumoniae* (rarely, *Candida albicans*)

Recommended zones for electromagnetic exposure: **1-4**(BL-1) on the affected side, **1-7**(GB-1) on the affected side, **10-5**(LI-11), **11-4**(LI-4).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area and also locally on inflammatory center for 5 minutes. Hold the therapeutic session on the first day 2-3 times daily, and then continue with 1 therapeutic session a day.

4.7. Uveitis

Uveitis means inflammation of the uveal tract, which is formed by the iris (iritis), ciliary body (cyclitis), and choroids (choroiditis). Inflammatory eye disease may, however, also originate primarily in the retina (retinitis) or retinal blood vessels (retinal vasculitis).

The systemic disorders associated with acute nongranulomatous anterior uveitis are HLA-B27-related conditions sacroiliitis, ankylosing spondylitis, Reiter's syndrome, proiasis, ulcerative colitis, and Crohn's disease. The management should be complex since it is reasonable to treat the underlying cause.

Recommended zones for electromagnetic exposure: **1-7**(GB-1) on the affected eye, **1-4**(BL-1) on the affected eye, **16-5**(LR-2), **16-1**(ST-36), **16-9**(GB-43).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area and also locally on the closed eyelid of affected eye for 5 minutes. It is advised to hold the therapeutic session on the first day 2-3 times, and to continue once daily until complete recovery.

4.8. Cataract

A cataract is a lens opacity. Cataracts are usually bilateral. They may be congenital (owing to intrauterine infections such as rubella and cytomegalovirus, inborn errors of metabolism such as galactosemia, or as yet unidentified hereditary factors); or secondary to systemic disease (diabetes, myotonic dystrophy, atopic dermatitis), systemic corticosteroid treatment, or uveitis. Senile cataract is by far the most common type; most persons over age 60 have some degree of lens opacity. Cigarette smoking and heavy alcohol consumption increase the risk of cataract formation. In most cases informational radiowave therapy can stop progressing the process.

Recommended zones for electromagnetic exposure: **1-7**(GB-1) right and left sides, **1-4**(BL-1) right and left sides, **1-6**(ST-1) right and left sides, **1-5**(TE-23), **3-6**(GB-20), **4-2**(GB-8), **11-5**(SI-2), **16-1**(ST-36), **16-4**(LR-3).

Use 5-6 recommended zones for electromagnetic exposure for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment. The duration of treatment course is 10 days. It is recommended to repeat the therapy in 3 weeks during 6 months.

4.9. Glaucoma

Chronic disease of the eye characterized by constant or periodical increased intraocular pressure that may produce defects in the field of vision. The management consists of informational radiowave therapy in combination with pharmacological agents.

Recommended zones for electromagnetic exposure: **1-5**(TE-23), **3-6**(GB-20), **4-2**(GB-8), **11-5**(SI-2), **16-1**(ST-36), **16-4**(LR-3), **1-4**(BL-1) right and left sides, **1-6**(ST-1) right and left sides, **1-7**(GB-1) right and left sides.

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes for each area. Change the zones during the treatment. The duration of treatment is 10 days. It is recommended to repeat the therapy in 3 weeks during 6 months.

4.10. Age-related macular degeneration

Age-related macular degeneration is the leading cause of permanent visual loss in the elderly. The exact cause is unknown, but the incidence increases with each decade over age 50 (to almost 30% by age 75). Other associations besides age include race (usually white), sex (slight female predominance), family history, and a history of cigarette smoking.

Age-related macular degeneration includes a broad spectrum of clinical and pathologic findings that can be classified into two groups: atrophic (“dry”) and exudative (“wet”). Although both types are progressive and usually bilateral, they differ in manifestations, prognosis, and management.

Recommended zones for electromagnetic exposure: **1-4**(BL-1) right and left sides, **1-7**(GB-1) right and left sides, **3-4**(GV-17), **12-10**(PC-7), **3-6**(GB-20).

Use all the recommended zone for one therapeutic session daily. Expose for 5 minutes for each area. The treatment course is 10-12 days. It is recommended to repeat treatment course in 4 weeks during the 6-9 months.

4.11. Myopia, hyperopia, astigmatism

Refractive errors are the most common cause of blurred vision. In emmetropia (the normal state), objects at infinity are seen clearly with the unaccommodated eye. Objects nearer than infinity are seen with the aid of accommodation, which increases the refractive power of the lens. In hyperopia, objects at infinity are not seen clearly unless accommodation is used, and near objects may not be seen because accommodative capacity is finite. Hyperopia is corrected with plus (convex) lenses. In myopia, the unaccommodated eye brings to a focus images of objects closer than infinity, the distance of such objects from the patient becoming shorter and shorter with increasing myopia. In astigmatism, the refractive errors in the horizontal and vertical axes differ. Informational radiowave therapy is effective in any of these refractive errors particularly in children and in early stages in adults.

Recommended zones for electromagnetic exposure: **1-1**(GV-24), **3-7**(BL-10), **11-2**(TE-5), **15-8**(KI-1), **16-4**(LR-3), **1-4**(BL-1) right and left sides, **1-5**(TE-23), **1-6**(ST-1) right and left sides, **1-7**(GB-1) right and left sides.

Use 5-6 zones for electromagnetic exposure for one therapeutic session daily. Expose 5 minutes each zone. Change the zones during the treatment. The duration of the treatment course is 10 days. It is recommended to repeat the therapy in 4 weeks during 6 months.

4.12. Nyctalopia

Synonyms are day sight, night blindness. It is decreased ability to see in reduced illumination. Nyctalopia is usually seen in patients with impaired rod function; often associated with a deficiency of vitamin A. There are several forms of nyctalopia:

- congenital nyctalopia manifests in early childhood. It is caused by congenital eye abnormalities;
- symptomatic nyctalopia is seen in some organic disorder of choroids, retina and optic nerve;
- alimentary nyctalopia is caused by the deficiency of retinol or the disorder of its metabolism in the organism (in liver diseases)/

Informational radiowave therapy could be effective in symptomatic and alimentary nyctalopia since it may provide the treatment of underlying cause.

Recommended zones for electromagnetic exposure: 1-4(BL-1) *right and left sides*, **1-7**(GB-1) *right and left sides*, **3-4**(GV-17), **12-10**(PC-7), **15-8**(KI-1), **16-5**(LR-2).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. In order to prevent recurrence it is recommended to repeat therapy in 3 months.

4.13. Ptosis

Eyelid ptosis is a drooping of the upper eyelid caused by dehiscence of the tendon of the levator muscle. This eye disorder may be congenital and acquired. Neurologic causes of ptosis include Horner's syndrome, in which the pupil is constricted, and third nerve palsy, in which there are abnormalities of eye movements and the pupil may be dilated. Local causes include congenital and acquired disorders of the levator muscle complex and tumors and infections of the eyelid. Myasthenia should always be considered.

Early informational radiowave therapy of congenital ptosis gives better result during 2-3 months. Surgery is usually required in acquired ptosis depending upon of causes. Informational radiowave therapy is indicated before and after surgery. Before surgery is required to prevent any complication during operation, and after to improve recovery and to relieve eyelid edema and to relieve pain. Informational radiowave therapy accelerates the healing process in 1,5-2 times and prevents scar tissue formation.

Recommended zones for electromagnetic exposure: 1-6(ST-1), **1-10**(SI-18), **2-1**(GV-26), **2-2**(ST-3), **3-2**(BL-7), **4-7**(TE-17), **4-9**(ST-6), **11-4**(LI-4).

Use all the recommended zones for one therapeutic session daily. Expose 5 minutes for each area. The therapy consists of informational radiowave therapy 10 days monthly during 3 months.

4.14. Squint (strabismus; cross-eyes; heterotropia)

Deviation of one eye from parallelism with the other. Paralytic (nonconcomitant) strabismus results from paralysis of one or more ocular muscles; it may be caused by a specific oculomotor nerve lesion. Eye motion is limited and diplopia increases in the fields of action of the paralyzed muscles. *Nonparalytic (concomitant) strabismus* usually results from unequal ocular muscle tone caused by a supranuclear abnormality within the CNS. It may be convergent (esotropia), divergent (exotropia), or vertical (hypertropia or hypotropia). *Phoria* (latent strabismus) is nonparalytic; the muscle imbalance

is overcome by the central nervous system tendency to fuse the images from each eye. It may occur as esophoria, exophoria, or hypophoria or hyperphoria. Disuse of an eye, as in cases of severe refractive error or impaired vision due to disease, may also result in strabismus. Since strabismus may result from serious ocular or neurologic disease, the eyes (including corneas, lenses, retinas, and optic nerves) and neurologic status of the patient, regardless of age, should be evaluated.

Informational radiowave therapy as a monotherapy is effective in early ages.

Recommended zones for electromagnetic exposure: **1-4**(BL-1) right and left sides, **1-6**(ST-1) right and left sides, **1-7**(GB-1) right and left sides, **3-6**(GB-20), **8-1**(GV-14), **12-4**(PC-6), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The duration of treatment is 10 days. Repeat the treatment course every month during 6 months. It is necessary to combine informational radiowave therapy with eye exercise under ophthalmologist control.

4.15. Tearing (lacrimation, epiphora)

An overflow of tears upon the cheek due to imperfect drainage by the tear-conducting passages. Watering (epiphora) is usually due to inadequate tear drainage through obstruction of lacrimal drainage system or malposition of the lower lid. Reflex tearing occurs with any disturbance of corneal epithelium. Tear secretion may be increased by emotion, foreign body irritation, trauma of lacrimal duct and eye bones, corneal ulcer, conjunctivitis, coryza, measles, hay fever, cluster headache (unilateral tearing), toxins.

Excessive tearing may be the symptom of congenital abnormalities such as obstruction of the lacrimal duct, congenital stricture or obliteration of lacrimal point and fistula of lacrimal sac. In these cases the surgery in combination with informational radiowave therapy is indicated. The primary goal of treatment is finding of the underlying cause. The management consists of the trial to treat it.

Informational radiowave therapy is indicated on any step of the management.

Recommended zones for electromagnetic exposure: **1-4**(BL-1) right and left sides, **1-6**(ST-1) right and left sides, **1-2**(GB-14), **1-7**(GB-1) right and left sides, **3-6**(GB-20), **10-5**(LI-11).

Extra points

For psychological problems: **3-1**(GV-20), **5-5**(CV-17), **12-9**(HT-7).

Use 5 zones for one therapeutic session daily. Expose 5 minutes for each zone. Change the zones during the treatment course. The duration of treatment is 7-10 days. On the first and second days hold therapeutic session twice a day.

Chapter 5. Disease of ear, nose and throat

5.1. Viral rhinitis (Common Cold).

The nonspecific symptoms of the ubiquitous common cold are present in the early phases of many diseases that affect the upper aerodigestive tract. Because there are numerous serologic types of rhinoviruses, adenoviruses, and other viruses, patients remain susceptible throughout life. Headache, nasal congestion, watery rhinorrhea, sneezing, and a scratchy throat accompanied by general malaise are typical in viral infections. The presence of purulent nasal discharge suggests bacterial infection. Early treatment gives the best results.

Recommended zones for electromagnetic exposure: 1-8(LI-20) right and left sides, **1-3**(BL-2) right and left sides, **8-1**(GV-14), **6-2**(CV-14), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session every day. Expose for 5 minutes each area. The treatment course is 5 days. First two days it is recommended to hold therapeutic sessions twice daily.

5.2. Allergic rhinitis

The symptoms of “hay fever” are similar to those of viral rhinitis but are usually more persistent and show seasonal variation. Nasal symptoms are often accompanied by eye irritation, which causes pruritus, erythema, and excessive tearing. Numerous allergens may cause these symptoms: pollens are most common in the spring, grasses in the summer, and ragweed in the fall. Dust and household mites may produce year-round symptoms.

Recommended zones for electromagnetic exposure: 1-8(LI-20) both sides, **2-2**(ST-3) both sides, **6-2**(CV-14), **10-5**(LI-11), **11-4**(LI-4).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 7-10 days.

5.3. Chronic rhinitis

Chronic rhinitis is a protracted sluggish inflammation of the nasal mucous membrane; in the later stages the mucous membranes with its glands may thicken (hypertrophic) or thin (atrophic). The causes of the disease are frequent colds, infections, systemic diseases – cardio-vascular, renal, toxic affection of mucous membrane of nasal cavity, disturbance of parasympathetic tone (parasympathetic rhinitis), pregnancy.

Symptoms include difficulty of nasal breathing and moderate nasal discharge.

Recommended zones for electromagnetic exposure: 1-3(BL-2) both sides, **1-8**(LI-20) both sides, **11-4**(LI-4), **10-6**(LI-10), **3-6**(GB-20).

Use all the recommended zones for therapeutic session daily. Expose for 5 minutes each area. The treatment course is 5-6 days. It is recommended to repeat therapy in two weeks.

5.4. Sinusitis

Sinusitis is a inflammation maxillary, frontal, sphenoid and ethmoidal sinuses. There are acute and chronic course of disease. The symptoms include fever, malaise, severe headache, nasal congestion, breathing through mouth, paranasal pain. Nasal discharge are liquid at first then become thick and purulent. The treatment consists of antibacterial agents and physical therapy. Surgery is recommended in severe cases. Informational radiowave therapy can stop inflammatory process and decrease the dose of antibacterial agents.

Recommended zones for electromagnetic exposure

First day: 1-3(BL-2) both sides, 1-9(ST-2) both sides, 11-4(LI-4), 10-6(LI-10),

Second day: 1-8(LI-20) both sides, 4-9(ST-6) both sides, 11-2(TE-5), 3-6(GB-20).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 7-10 days.

5.5. Tonsillitis

Tonsillitis is inflammation of the palatine tonsil. It is usually characterized by chronic course, history of frequent sore throats. Informational radiowave therapy should be combined with traditional methods of management to decrease intoxication.

***Recommended zones for electromagnetic exposure: 11-4(LI-4), 12-11(LU-11), 10-5(LI-11),
4-9(ST-6), 16-7(ST-44).***

To prevent exacerbations of tonsillitis should be used 10-6 for 10 minutes 1-2 times every month. Use all the recommended zones for one therapeutic session for 5 minutes each area. The treatment course is 7-10 days.

5.6. External otitis

External otitis presents with otalgia, frequently accompanied by pruritus and purulent discharge. There is often a history of recent water exposure or mechanical trauma (eg, scratching, cotton applicators). External otitis is usually caused by gram-negative rods or fungi. Examination reveals erythema and edema of the ear canal skin, often with a purulent exudate. Fundamental to the treatment of external otitis is protection of the ear from additional moisture and avoidance of further mechanical injury by scratching. Otic drops are generally very effective. If causative pathogen is fungus it is recommended to combine informational radiowave therapy with antimycotic agents.

***Recommended zones for electromagnetic exposure: 4-7(TE-17), 4-5(SI-19), 3-6(GB-20), 11-4(LI-4),
15-2(KI-7)***

Use all the recommended zones for therapeutic session daily. Expose for 5 minutes each area. Early informational radiowave therapy gives best results. The treatment course is 5-6 days. It is recommended to hold therapeutic session twice daily.

5.7. Acute otitis media

Acute otitis media is a bacterial infection of the mucosally lined air-containing spaces of the temporal bone. Purulent material forms not only within the middle ear cleft but also within the mastoid

air cells and petrous apex when they are pneumatized. Acute otitis media is usually precipitated by a viral upper respiratory tract infection that causes auditory tube edema.

Acute otitis media is most common in infants and children, though it may occur at any age. The patient presents with otalgia, aural pressure, decreased hearing, and often fever. The typical physical findings are erythema and decreased mobility of the tympanic membrane.

The signs of development of complications are headache, sudden hearing loss, dizziness, fever and chill. Acute otitis media may be complicated with acute mastoiditis, facial paralysis, neurosensory hearing loss, and meningitis.

Recommended zones for electromagnetic exposure: 11-4(LI-4), **15-2**(KI-7), **15-3**(KI-3), **11-2**(TE-5), **4-7**(TE-17), **2-5**(LI-18), **3-6**(GB-20)

Use all the recommended zones for therapeutic session daily. Expose for 5 minutes each area. It is recommended to hold therapeutic session twice daily on first day of treatment. The treatment course is 10 days. Severe cases are needed combination informational radiowave therapy with antibiotic agents.

5.8. Tinnitus

Tinnitus is the perception of abnormal ear or head noises. Persistent tinnitus usually indicates the presence of sensory hearing loss.

When severe and persistent, tinnitus may interfere with sleep and the ability to concentrate, resulting in considerable psychologic distress.

CT scan and vascular studies are often necessary to establish a definitive diagnosis.

Recommended zones for electromagnetic exposure: 4-6(GB-2), **4-8**(GB-12), **3-1**(GV-20), **4-4**(TE-19), **3-3**(BL-8), **12-7**(HT-5), **16-9**(GB-43)

Use all the recommended zones for therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days.

5.9. Earache

It is recommended to define more accurately diagnosis and adequate treatment plan. Informational radiowave therapy is emergency aid of this symptom to relief pain.

Recommended zones for electromagnetic exposure: 4-6(GB-2), **4-4**(TE-19), **4-7**(TE-17), **11-4**(LI-4), **3-1**(GV-20).

Use all the recommended zones for therapeutic session daily. Expose for 5 minutes each area. If it is necessary repeat the therapeutic session in 3-4 hours.

5.10. Pharyngitis

Pharyngitis is inflammation of the mucous membrane of pharynx. It commonly affects elderly and middle age group of people. Children suffer rare from its. The causes include chronic inflammatory diseases of underlying parts of pharynx - nasal cavity, tooth, chronic nasal congestion. Symptoms are hacking, scratching, tickling and smarting sensation on swallowing. The management is directed to elimination of local and general causes. Informational radiowave therapy hastens recovery.

Recommended zones for electromagnetic exposure: 2-4(CV-23), 16-1(ST-36), 11-4(LI-4), 1-8(LI-20), 11-5(SI-2).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. The treatment course is 7-10 days.

5.11. Laryngitis

Laryngitis is acute inflammation of the mucous membrane of the larynx. It usually follows inflammatory process of nasal cavity, pharynx in measles, pertussis and influenza. It is characterized hoarseness, dryness, scratching, tickling and smarting sensation on swallowing. Patient has dry cough transformed into productive cough. The patient should be warned to avoid vigorous use of the voice (singing, shouting) while laryngitis is present. Informational radiowave therapy is directed to the prevention of complications.

Recommended zones for electromagnetic exposure: 8-1(GV-14), 2-4(CV-23), 11-4(LI-4), 10-5(LI-11), 12-1(LU-5), 16-2(ST-40), 15-8(KI-1).

Use all the recommended zones for one therapeutic session of 5 minutes of expose. The treatment course is 7-10 days.

5.12. Tracheitis

Tracheitis is inflammation of the mucous membrane of the trachea. There is acute and chronic tracheitis. Acute tracheitis is often accompanied with acute rhinitis, pharyngitis, and laryngitis. The most common cause of tracheitis is viral infection. The inhalation of dry, cold or dusty air, toxic material and gases.

Recommended zones for electromagnetic exposure: 12-5(LU-7), 5-5(CV-17), 12-6(LU-9), 8-6(BL-43), 16-1(ST-36), 15-4(KI-6), 11-4(LI-4).

For severe cough: 11-5(SI-2), 8-2(BL-11), 8-5(BL-13), 16-2(ST-40).

In acute stage it is recommended to hold therapeutic sessions 2-3 times daily for first two days. In chronic course therapeutic sessions are recommended once daily for treatment course of 7-10 days. For one therapeutic session use 5-6 recommended zones, expose for 5 minutes each area.

Chapter 6. Cardiovascular diseases

6.1. Coronary Heart Disease

(Arteriosclerotic Coronary Artery Disease; Ischemic Heart Disease)

Coronary atherosclerotic heart disease is the commonest cause of cardiovascular disability and death in the world. Men are more often affected than women by an overall ratio of 4:1, but before age 40 the ratio is 8:1, and beyond age 70 it is 1:1. In men, the peak incidence of clinical manifestations is at age 50-60; in women, at age 60-70.

There are a number of important risk factors for premature coronary heart disease. These include a positive family history (particularly when onset is before age 50), age, male gender, blood lipid abnormalities, hypertension, physical inactivity, cigarette smoking, diabetes mellitus, and hypoestrogenemia in women. Recent research has focused on abnormalities of lipid metabolism, which play a direct role in the pathophysiology of this condition. Risk increases progressively with higher level LDL cholesterol and declines with higher level of HDL cholesterol.

Early application of informational radiowave therapy in combination with healthy life-style may prevent the development of complications since action of electromagnetic therapy is directed on improving tissue metabolism. On late stages it promotes milder course of disease.

Recommended zones for electromagnetic exposure: 12-2(PC-3), 13-2(GB-39), 16-1(ST-36), 8-3(GB-21), 6-2(CV-14), 15-1(SP-6), 15 -2(KI-7), 4-4(TE-19), 15-8(KI-1).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each zone. Change the zone during the therapy. The treatment course is 10-12 days. Repeat therapy every month for 6 months. The management may take long time.

6.2. Angina pectoris

Precordial chest pain, usually precipitated by stress or exertion, relieved rapidly by rest or nitrates. Angina pectoris is usually due to atherosclerotic heart disease. Coronary vasospasm may occur at the site of a lesion or, less frequently, in apparently normal vessels. Other unusual causes of coronary artery obstruction such as congenital anomalies, emboli, arteritis, or dissection may cause ischemia or infarction.

The diagnosis of angina pectoris depends on principally upon the history, which should specifically include the following information.

Circumstances that precipitate and relieve angina.

Characteristics of the discomfort.

Location and radiation.

Duration of attacks.

Effect of nitroglycerin.

Risk factors.

Signs.

With appropriate history, the diagnosis angina pectoris is more than 90% certain.

Present medicinal methods of treatment of stenocardia don't provide efficient management of it.

Informational radiowave therapy has nonspecific action on entire body involving molecular and cellular levels; it does not have negative side effects, it is well tolerated and doesn't have any contraindications.

Informational radiowave therapy provides effective treatment and it is recommended for rapid relief of symptoms of stenocardia, long care and rehabilitation.

Application of informational radiowave therapy in the management of stenocardia prevents development of acute myocardial infarction.

For rapid relief of the symptoms of stenocardia:

Recommended zones for electromagnetic exposure: 12-4(PC-6), 5-6(ST-16) left side, 12-9(HT-7), 12-8(HT-6), 15-6(SP-4), 16-1(ST-36).

Use all the recommended zones. Expose for 5 minutes each area. Informational radiowave therapy may be combined with pharmacologic agents. If there is no result of treatment it is necessary to resort to the help of special medical care immediately.

The management of stenocardia and postinfarction ischemia should be started only after detail observation at the hospital. The management includes pharmacologic agents with informational radiowave therapy or informational radiowave therapy alone.

Recommended zones for electromagnetic exposure:

On the morning: 12-8(HT-6), 12-2(PC-3), 5-5(CV-17), 5-6(ST-16) left side, 12-10(PC-7), 15-6(SP-4), 16-5(LR-2);

On the evening: 12-9(HT-7), 3-6(GB-20), 5-6(ST-16) left side, 6-2(CV-4), 16-1(ST-36), 8-7(BL-15), 10-5 (LI-11).

Use all the recommended zones twice daily: on the morning and evening time on the first 5-6 days of treatment. Continue with one therapeutic session a day. Change the treatment schedule during the treatment time 'morning' recommended zones use for the first day, 'evening' zones use for second day etc. Expose for 5 minutes each area. The treatment course is 10-12 days. It is necessary to repeat treatment in 4 weeks for 6-12 months. Complete rehabilitation period may last from 6 to 12 months.

6.3. Acute myocardial infarction

Myocardial infarction results from prolonged myocardial ischemia, precipitated in most cases by an occlusive coronary thrombus at the site of a preexisting (though not necessarily severe) atherosclerotic plaque. More rarely, infarction may result from prolonged vasospasm, inadequate myocardial blood flow (eg, hypotension), or excessive metabolic demand. Very rarely, myocardial infarction may be caused by embolic occlusion, vasculitis, aortic root or coronary artery dissection, or aortitis. Cocaine is a cause of infarction, which should be considered in young individuals without risk factors.

The size and anatomic location of the infarction determine the acute clinical picture, the early complications, and the long-term prognosis. The hemodynamic findings are related directly to the extent of necrosis (together with the amount of damage from previous infarction).

Informational radiowave therapy pretends to be most effective method of prevention and rehabilitation of acute myocardial infarction since its action is directed on pathogenetic process of coronary heart disease.

Informational radiowave therapy is applied in combination with complex treatment of acute myocardial infarction at hospital intensive care unite.

Recommended zones for electromagnetic exposure:

On the morning: 12-8(HT-6), 12-2(PC-3), 5-5(CV-17), 5-6(ST-16) left side, 12-10(PC-7), 15-6(SP-4), 16-5(LR-2);

On the evening: 12-9(HT-7), 3-6(GB-20), 6-2(CV-14), 5-6(ST-16) left side, 16-1(ST-36), 8-7(BL-15), 10-5(LI-11).

Extra points

For pulmonary edema: 13-2(GB-39), 6-1(CV-15), 5-5(CV-17);

For collapse: 2-1(GV-26), 2-3(CV-24).

It is recommended to hold therapeutic session twice daily – on the morning and evening on first 14 days. Then continue with one therapeutic session a day. Change the treatment schedule during the treatment time ‘morning’ recommended zones use for the first day, ‘evening’ zones use for second day etc. Expose for 5 minutes each area. The treatment course consists of 45 days. It is recommended to hold 10 days treatment in 4 weeks during 6-12 months. Complete rehabilitation period may last from 6 to 12 months.

6.4. Sinus arrhythmia, bradycardia, and tachycardia

Sinus arrhythmia is a cyclic increase in normal heart rate with inspiration and decrease with expiration. It results from reflex changes in vagal influence on the normal pacemaker and disappears with breath holding or increase of heart rate due to any cause. It has no clinical significance. It is common in both the young and the elderly. There are respiratory sinus arrhythmia and nonrespiratory sinus arrhythmia. Respiratory sinus arrhythmia commonly seen in adolescents and elderly people, in recovery period after infectious diseases and relates with respiratory phases. Nonrespiratory sinus arrhythmia is not related to the respiratory cycle and commonly seen in patients with cardiovascular diseases. Respiratory sinus arrhythmia does not need any treatment. Nonrespiratory sinus arrhythmia requires management of underlying cause.

Recommended zones for electromagnetic exposure: **11-6**(HT-9), **12-3**(HT-3), **12-7**(HT-5), **12-4**(PC-6), **8-4**(SI-14), **3-1**(GV-20), **5-6**(ST-16) *left side*, **3-6**(GB-20), **16-1**(ST-36), **15-4**(KI-6).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes for each zone. Change the zone during the therapy. The treatment course is 8-10 days. It is recommended to repeat therapy in 3 weeks for 4 months.

Sinus bradycardia is a heart rate slower than 50/min due to increased vagal influence on the normal pacemaker or organic disease of sinus node. The rate usually increases during exercise or administration of atropine. In healthy individuals, and especially in patients who are in excellent physical condition, sinus bradycardia to a rate of 50 or even lower is a normal findings. However, severe sinus bradycardia may be an indication of sinus node pathology (see below), especially in elderly patients and individuals with heart disease. It may cause weakness, confusion, or syncope if cerebral perfusion is impaired. Atrial and ventricular ectopic rhythms are more apt to occur with slow sinus rates. Pacing may be required if symptoms correlate with the bradycardia. The management should be directed to underlying cause of disorder; the administration of atropine, belladonna and codeine is often necessary.

Recommended zones for electromagnetic exposure: **12-9**(HT-7), **16-1**(ST-36), **5-6**(ST-16) *left side*, **8-7**(BL-15), **3-6**(GB-20), **6-2**(CV-14), **12-10**(PC-7), **3-5**(GV-16).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 4 months.

Sinus tachycardia is defined as a heart rate faster than 100 beats/min that is caused by rapid impulse formation from the normal pacemaker; it occurs with fever, exercise, emotion, pain, anemia, heart failure, shock, thyrotoxicosis, or in response to many drugs. Alcohol and alcohol withdrawal are common causes of sinus tachycardia and other supraventricular arrhythmias. The onset and termination are usually gradual, in contrast to paroxysmal supraventricular tachycardia due to reentry. The rate infrequently exceeds 160/min but may reach 180/min in young persons. The rhythm is basically regular, but serial 1-minute counts of the heart rate indicate that it varies five or more beats per minute with

changes in position, with breath holding or sedation. Rare individuals have persistent or episodic “inappropriate” sinus tachycardia that may be very symptomatic or may lead to left ventricular contractile dysfunction. Radiofrequency modification of the sinus node has mitigated this problem.

Recommended zones for electromagnetic exposure: 11-6(HT-9), **12-4**(PC-6), **15-6**(SP-4), **5-6**(ST-16) left side, **12-7**(HT-5), **5-5**(CV-17), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 4 months.

6.5. Atrial premature beats (Atrial extrasystoles)

Atrial premature beats occur when an ectopic focus in the atria fires before the next sinus node impulse or a reentry circuit is established. The contour of the *P* wave usually differs from the patient’s normal complex. The subsequent R-R cycle length is usually unchanged or only slightly prolonged. Such premature beats occur frequently in normal hearts and are never a sufficient basis for a diagnosis of heart disease. Speeding of the heart rate by any means usually abolishes most premature beats.

Recommended zones for electromagnetic exposure: 2-7(HT-5), **12-4**(PC-6), **8-4**(SI-14), **12-9**(HT-7), **16-1**(ST-36), **5-6**(ST-16) left side, **3-6**(GB-20).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 4 months.

6.6. Paroxysmal supraventricular tachycardia

This is commonest paroxysmal tachycardia and often occurs in patients without structural heart disease. Attacks begin and end abruptly and may last a few seconds to several hours or longer. The heart rate may be 140-240/min (usually 160-220/min) and is perfectly regular (despite exercise or change in position). Patients may be asymptomatic except for awareness of rapid heart action, but some experience mild chest pain or shortness of breath, especially when episodes are prolonged, even in the absence of associated cardiac abnormalities. Paroxysmal supraventricular tachycardia may result from digitalis toxicity and then is commonly associated with atrioventricular block.

The most common mechanism for paroxysmal supraventricular tachycardia is reentry, which may be initiated or terminated by a fortuitously timed atrial or ventricular premature beat. The reentry circuit may involve sinus node, the atrioventricular node, or an accessory pathway. About one-third of patients have aberrant pathways to the ventricles.

Recommended zones for electromagnetic exposure: 5-6(ST-16) left side, **5-5**(CV-17), **12-10**(PC-7), **6-6**(CV-12), **3-6**(GB-20), **16-4**(LR-3), **15-3**(KI-3).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 4-5 months.

6.7. Ventricular premature beats (Ventricular Extrasystoles)

Ventricular premature beats are similar to atrial premature beats in mechanism and manifestations but are more common. They are by wide *QRS* complexes that differ in morphology from the patient’s normal beats. They are usually not preceded by a *P* wave, although retrograde ventriculoatrial conduction may occur. Unless the latter is present, there is a fully compensatory pause. Bigeminy and

trigeminy are arrhythmias in which every second or third beat is premature. Exercise generally abolishes premature beats in normal hearts, and the rhythm becomes regular. The patient may or may not sense the irregular beat, usually as a skipped beat.

Recommended zones for electromagnetic exposure: **12-9**(HT-7), **16-1**(ST-36), **12-5**(LU-7), **5-6**(ST-16) left side, **12-4**(PC-6), **3-6**(GB-20), **11-6**(HT-19), **6-6**(CV-12).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 4 months.

6.8. Ventricular tachycardia

Ventricular tachycardia is defined as three or more consecutive ventricular premature beats. The usual rate is 160-240/min and is moderately regular but less so than atrial tachycardia. Carotid sinus pressure has no effect. The distinction from aberrant conduction of supraventricular tachycardia may be difficult and is discussed above. The usual mechanism is reentry, but abnormally triggered rhythms occur. Ventricular tachycardia is either nonsustained (lasting less than 30 seconds) or sustained. It may be asymptomatic or associated with syncope or milder symptoms of impaired cerebral perfusion. Ventricular tachycardia is a frequent complication of acute myocardial infarction and dilated cardiomyopathy but may occur in hypertrophic cardiomyopathy, mitral valve prolapse, and in most other forms of myocardial disease.

Recommended zones for electromagnetic exposure: **11-6**(HT-9), **12-4**(PC-6), **15-6**(SP-4), **5-6**(ST-16) left side, **12-7**(HT-5), **5-5**(CV-17), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 4 months.

6.9. Atrioventricular block

Atrioventricular block is categorized as first-degree (PR interval > 0.21 s with all atrial impulses conducted), second-degree (intermittent blocked beats), or third-degree (complete heart block, which no supraventricular impulses are conducted to the ventricles).

Recommended zones for electromagnetic exposure: **12-4**(PC-6), **16-1**(ST-36), **8-1**(GV-14), **11-6**(HT-9), **15-3**(KI-3), **12-9**(HT-7), **12-10**(PC-7), **5-6**(ST-16) left side, **12-6**(LU-9), **5-5**(CV-17), **3-1**(GV-20).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It is recommended to repeat the therapy in 4 weeks during 4-5 months.

6.10. Acute myocarditis

Acute myocarditis causes focal or diffuse inflammation of the myocardium. Most cases are infectious, caused by viral, bacterial, rickettsial, spirochetal, fungal, or parasitic agents; but toxins, drugs, and immunologic reaction can also cause myocarditis.

6.10.1. Infectious myocarditis

Viral myocarditis is the most common form and is usually caused by coxsakieviruses, but a host of other agents have also been responsible. Rickettsial myocarditis occurs with scrub typhus, Rocky Mountain spotted fever, and Q fever. Diphtheritic myocarditis is caused by the toxin and often is manifested by conduction abnormalities as well as heart failure.

Patients may present several days to a few weeks after the onset of an acute febrile illness or a respiratory infection or with heart failure without antecedent symptoms. Pleural-pericardial chest pain is common. Examination reveals tachycardia, gallop rhythm, and other evidence of heart failure or conduction defect.

Specific antimicrobial therapy is indicated when an infecting agent is identified. Immunosuppressive therapy with corticosteroids and other agents have been felt by some to improve the outcome when the process is acute (< 6 months) and if the biopsy suggests ongoing inflammation.

6.10.2. Drug-induced & toxic myocarditis

A variety of medications, illicit drugs, and toxic substances can produce acute or chronic myocardial injury; the clinical presentation varies widely. Doxorubicin and other cytotoxic agents, emetine, and catecholamines (especially with pheochromocytoma) can produce a pathologic picture of inflammation and necrosis together with clinical heart failure and arrhythmias; toxicity of the first two is dose-related. Radiation can cause an acute inflammatory reaction as well as a chronic fibrosis, usually in conjunction with pericarditis.

The management of all types myocarditis is complex – informational radiowave therapy in combination with medications.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **3-6**(GB-20), **5-6**(ST-16) left side, **12-4**(PC-6), **8-7**(BL-15), **5-5**(CV-17), **12-2**(PC-3), **12-10**(PC-7), **12-9**(HT-7), **12-13**(HT-8), **11-6**(HT-9), **13-3**(BL-60), **16-4**(LR-3), **16-1**(ST-36), **5-7**(KI-23).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It is recommended to repeat the therapy in 3 weeks during 3 months.

6.11. Cardiomyopathies

The cardiomyopathies are a heterogeneous group of entities affecting the myocardium primarily and not associated with the major causes of cardiac disease, ie, ischemic heart disease, hypertension, valvular disease, or congenital defects. While some have specific causes, many cases are idiopathic.

6.11.1. Primary dilated cardiomyopathy

Dilated cardiomyopathies usually present with symptoms and signs of congestive heart failure (most commonly dyspnea). Occasionally, symptomatic ventricular arrhythmias are the presenting event. Left ventricular dilation and systolic dysfunction are essential for diagnosis. Often no cause can be identified, but chronic alcohol abuse and myocarditis are probably frequent causes. Histologically, the picture is one of extensive fibrosis.

Informational radiowave therapy is administered to increase resistibility, to eliminate intoxication and improve blood supply to the myocardium.

Recommended zones for electromagnetic exposure: **12-4**(PC-6), **16-1**(ST-36), **8-1**(GV-14), **11-6**(HT-9), **15-3**(KI-3), **12-9**(HT-7), **12-10**(PC-7), **5-6**(ST-16) left side, **12-6**(LU-9), **5-5**(CV-17), **3-1**(GV-20).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It is recommended to repeat the therapy in 4 weeks during 4-5 months.

6.11.2. Hypertrophic cardiomyopathy

May present with dyspnea, chest pain, syncope. Myocardial hypertrophy unrelated to any pressure or volume overload tends to impinge upon the left ventricular cavity. The interventricular septum may be disproportionately involved (asymmetric septal hypertrophy), but in some cases the hypertrophy localized to the apex. The left ventricular outflow tract is often narrowed during systole between the bulging septum and an anteriorly displaced anterior mitral valve leaflet, causing a dynamic obstruction (hence the name idiopathic hypertrophic subaortic stenosis). The obstruction is worsened by factors that increase myocardial contractility (sympathetic stimulation, digoxin, postextrasystolic beat) or that decrease left ventricular filling (Valsalva's maneuver, peripheral vasodilators).

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **3-6**(GB-20), **5-6**(ST-16) *left side*,
12-4(PC-6), **8-7**(BL-15), **5-5**(CV-17), **12-2**(PC-3),
12-10(PC-7), **12-9**(HT-7), **12-13**(HT-8), **11-6**(HT-9),
13-3(BL-60), **16-4**(LR-3), **16-1**(ST-36), **5-7**(KI-23).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It is recommended to repeat the therapy in 3 weeks during 9 months.

6.11.3. Restrictive cardiomyopathy

Restrictive cardiomyopathy is characterized by impaired diastolic filling with preserved contractile function. This condition is relatively uncommon, with the most frequent causes being amyloidosis, radiation, and myocardial fibrosis after open heart surgery. Other causes of restrictive picture are infiltrative cardiomyopathies (eg, sarcoidosis, hemochromatosis, carcinoid syndrome) and connective tissue diseases (eg, scleroderma).

Recommended zones for electromagnetic exposure: **12-4**(PC-6), **16-1**(ST-36), **8-1**(GV-14), **11-6**(HT-9),
15-3(KI-3), **12-9**(HT-7), **12-10**(PC-7), **5-6**(ST-16)
left side, **12-6**(LU-9), **5-5**(CV-17), **3-1**(GV-20).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It is recommended to repeat the therapy in 4 weeks during 4-5 months.

6.12. Inflammatory pericarditis

Acute inflammation of the pericardium may be infectious in origin or may be due to systemic diseases (autoimmune syndromes, uremia), neoplasm, radiation, drug toxicity, hemopericardium, or contiguous inflammatory processes in the myocardium or lung. In many of these conditions, the pathologic process involves both the pericardium and the myocardium.

The presentation and course of inflammatory pericarditis depend on its cause, but all syndromes are often (not always) associated with chest pain, which is usually pleuritic and postural (relieved by sitting). The pain is substernal but may radiate to the neck, shoulders, back, or epigastrium. Dyspnea may also be present.

Recommended zones for electromagnetic exposure: **12-10**(PC-7), **5-6**(ST-16) *left side*, **12-4**(PC-6),

16-1(ST-36), **8-1**(GV-14), **11-6**(HT-9), **12-9**(HT-7),
5-5(CV-17), **3-1**(GV-20).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10 days. It is recommended to repeat the therapy in 4 weeks during 4-5 months.

6.13. Systemic Hypertension

There are two types of hypertension:

Primary (Essential) hypertension. In about 95% of cases, no cause can be established. The condition occurs in 10-15% of white adults and 20-30% of black adults in USA. The onset of essential hypertension is usually between ages 25 and 55; it is uncommon before age 20.

Secondary hypertension. In young people, secondary hypertension results from renal insufficiency, renal artery stenosis, or coarctation of the aorta.

The pathogenesis of **essential hypertension** is multifactorial. Genetic factors play an important role. Children with one – and even more so with two – hypertensive parents tend to have higher blood pressures. Environmental factors also appear to play an important role. Increased salt intake has long been incriminated as a pathogenic factor in essential hypertension. It alone is probably not sufficient to elevate blood pressure to abnormal levels; a combination of too much salt plus genetic predisposition is required. Other factors that may be involved in the pathogenesis of essential hypertension are the following:

Sympathetic nervous system hyperactivity.

Renin-angiotensin system.

Defect in natriuresis.

Intracellular sodium and calcium.

Exacerbating factors (excessive use of alcohol, cigarette smoking, polycythemia, nonsteroidal anti-inflammatory agents).

Secondary hypertension: approximately 5% of patients with hypertension can be found to have specific causes. These secondary causes include the following:

Estrogen use.

Renal disease.

Renal vascular hypertension.

Primary hyperaldosteronism and Cushing's syndrome.

Pheochromocytoma.

Coarctation of the aorta.

Hypertension associated with pregnancy.

Other causes of secondary hypertension.

All patients with high normal or elevated blood pressures, those who have a family history of cardiovascular complications of hypertension, and those who have multiple coronary risk factors should be counseled about nonpharmacologic approaches to lowering blood pressure. Such as weight reduction, reduced alcohol consumption, smoking cessation, physical exercise and in some patients reduced salt intake.

The goal of pharmacologic treatment should be to reduce blood pressure to normal levels (ie, < 140/90 mm Hg) with minimal side effects.

Essential hypertension is characterized by:

Elevations in pressure occur without any known causes;

Hereditary factor play an important role.

The causes of essential hypertension are not defined accurately yet.

The management is poorly symptomatic – administration of antihypertensive agents. Informational radiowave therapy is directed to restoration of informational control system of the integral organism of patient. It reduces arterial blood pressure, improves sleep, relieves anxiety symptoms. Patients on I and II stages may be treated at home with informational radiowave therapy under constant blood pressure control. It is possible cessation of antihypertensive agents or reduction of its doses. III stage requires hospitalization and complex management in combination with informational radiowave therapy.

Recommended zones for electromagnetic exposure: 3-6(GB-20), 12-4(PC-6), 10-2(LI-15), 15-1(SP-6), 15-8(KI-1), 12-9(HT-7), 13-3(BL-60).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 2 weeks during 4 months. The treatment takes long time; it is necessary to measure blood pressure before and after therapeutic session.

6.14. Renal hypertension

Renal vascular hypertension is caused by renal diseases (acute and chronic glomerulonephritis, polycystic renal disease, hydronephrosis, congenital abnormalities and etc). The treatment is conservative and it is directed to the functional recovery of renal vessels and renal parenchyma. Informational radiowave therapy may prevent development of disorders and prolong remission period.

Recommended zones for electromagnetic exposure: 15-8(KI-1), 15-3(KI-3), 15-1(SP-6), 12-2(PC-3), 16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 3 weeks during 4 months. The treatment takes long time; it is necessary to measure blood pressure before and after therapeutic session.

6.15. Endocrine hypertension

It is caused by disorder of adrenal gland (adrenal adenoma, Cushing's syndrome), hypothalamus, hypophysis. The informational radiowave therapy is directed to functional recovery of endocrine system.

Recommended zones for electromagnetic exposure: 4-3(TE-20), 4-7(TE-17), 15-2(KI-7), 3-7(BL-10), 3-3(BL-8), 11-7(TE-1), 8-4(SI-14), 15-6(SP-4).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 8-10 days. It is recommended to repeat the therapy every month during for 6 months. It is necessary to measure blood pressure before and after therapeutic session.

6.16. Hemodynamic hypertension

Hemodynamic hypertension is caused by increase blood viscosity and volume (polycythemia, erythrocythemia). Nonspecific action of informational radiowave therapy provides milder course of these disorders.

Recommended zones for electromagnetic exposure: 12-4(PC-6), **12-10**(PC-7), **12-2**(PC-3), **16-4**(LR-3), **15-5**(KI-2), **10-5**(LI-11), **5-5**(CV-17).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 3 months. It is necessary to measure blood pressure before and after therapeutic session.

6.17. Neurogenic hypertension

Functional disturbances of higher nervous activity or organic diseases of the brain structures that regulate systemic blood pressure cause neurogenic hypertension. Hypertension conditioned by higher nervous activity disturbances is due to frequent prolonged stress situations with negative emotions. Thus activation of sympathetic nervous system influences on organs and tissues that leads to increase of arterial vascular tone, stimulation of cardiac function and elevation of cardiac output. Informational radiowave therapy is directed to elimination of pathogenetic mechanism of neurogenic hypertension.

Recommended zones for electromagnetic exposure: 3-6(GB-20), **3-1**(GV-20), **3-7**(BL-10), **3-3**(BL-8), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8-10 days. It is recommended to repeat the therapy in 4 weeks during 4-5 months. It is necessary to measure blood pressure before and after therapeutic session.

6.18. Hypotension

Hypotension is characterized by reduced arterial blood pressure. There is primary and secondary arterial hypotension. Primary hypotension includes two kinds: hereditary constitutional state of regulation of vascular tone and arterial blood pressure within physiologic range (“physiologic hypotension”). Chronic state with typical symptoms: weakness, fatigue, headache, sleepiness, flabbiness, orthostatic reactions, fainting, motion sickness, increased barosensitivity and thermosensitivity (“neurocirculatory asthenia”). Secondary hypotension is seen in infectious diseases, peptic ulcer, mixedema, anemia, liver cirrhosis, side effects of drugs and etc. The management is directed to the elimination and treatment of underlying cause.

Recommended zones for electromagnetic exposure: 2-5(LI-18), **8-4**(SI-14), **11-2**(TE-5), **12-6**(LU-9), **12-7**(HT-5), **15-4**(KI-6), **16-1**(ST-36), **15-1**(SP-6), **11-4**(LI-4).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 8-10 days. It is recommended to repeat the therapy in 3 weeks during for 2 months.

6.19. Atherosclerotic occlusive disease

Occlusive disease of the aorta and its branches is a common cause of disability. It is also a predictor of morbidity for patients with cardiac disease and those undergoing general surgery. It is

essential for the primary to emphasize its prevention, particularly in light of what is known about etiologic factors. Smoking must be interdicted in all individuals, and serum cholesterol should be determined in all adults under the care of physicians. Discontinuance of smoking and dietary or pharmacologic management when the serum cholesterol exceeds 200 are prudent measures likely to reduce morbidity from atherosclerosis.

Informational radiowave therapy is directed to functional recovery nervous and endocrine systems, increase protective functions of patient organism, dilation peripheral vessels, improvement blood circulation and supply to tissues.

Recommended zones for electromagnetic exposure: **16-1**(ST-36), **16-3**(ST-41), **13-3**(BL-60), **15-1**(SP-6), **12-2**(PC-3), **15-3**(KI-3), **15-8**(KI-1), **13-6**(BL-65), **14-1**(BL-40) *right and left sides*, **10-5**(LI-11), **9-7**(BL-31).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10-12 days. It is recommended to repeat the therapy in 2-3 weeks during for 4 months.

When trophic disturbances occur it is recommended to apply electromagnetic waves locally on the site of lesions. The treatment usually takes long time. Risk factors such as smoking, alcohol abuse, cold should be avoided.

6.20. Varicose veins

Varicose veins develop predominantly in the lower extremities. They consist of abnormally dilated, elongated, and tortuous alterations in saphenous veins and their tributaries. An inherited defect seems to play a major role in the development of varicosities in many instances. Contributing factors include prolonged standing or heavy lifting, pregnancy, ascites. Patients may be asymptomatic or may be associated with fatigue, aching, discomfort, or pain.

Over the years the surrounding tissue and skin may develop secondary changes such fibrosis, chronic edema, and skin pigmentation and atrophy, chronic stasis dermatitis, thrombophlebitis.

The management includes nonsurgical and surgical measures. The choice of the method of the treatment depends on stage of the disease.

Informational radiowave therapy is effective on any stage of disease. Applying informational radiowave therapy results in the improvement of the microcirculation of the tissues that prevents the development of the complications.

Recommended zones for electromagnetic exposure: **9-6**(BL-25), **9-10**(GB-30), **9-7**(BL-31), **13-3**(BL-60), **13-6**(BL-65), **14-1**(BL-40) *right and left sides*, **16-1**(ST-36), **16-3**(ST-41).

Use 5-6 recommended zones and locally on the affected skin for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10-12 days. It is recommended to repeat the therapy in 3 weeks during for 3 months. If pigmentations and eczema are present expose affected areas for 10 minutes.

6.21. Thrombophlebitis

Thrombophlebitis is partial or complete occlusion of a vein by a thrombus with inflammatory changes in the wall of the vein. Trauma to the endothelium of the vein wall resulting in exposure of subendothelial tissues to platelets in the venous blood may initiate thrombosis, especially if a degree of

venous stasis also exists. Platelet aggregates form on the vein wall followed by the deposition of fibrin, leucocytes, and finally erythrocytes; a thrombus results that can then propagate along the veins as a free-floating clot. Within 7-10 days, this thrombus becomes adherent to the vein wall, and secondary inflammatory changes develop, although a free-floating tail may persist. There are thrombophlebitis of the superficial and thrombophlebitis of deep veins. The patient may complain of dull ache, a tight feeling, or frank pain in the calf or the whole leg, especially walking.

The management is usually nonsurgical and includes following measures: bed rest for 7-14 days, anticoagulation therapy in combination with informational radiowave therapy.

Informational radiowave therapy is effective on any stage of disease. Applying informational radiowave therapy results in the improvement of the microcirculation of the tissues that prevents the development of the complications.

Recommended zones for electromagnetic exposure: 9-6(BL-25), 9-10(GB-30), 9-7(BL-31), 13-3(BL-60), 13-6(BL-65), 14-1(BL-40) right and left sides, 16-1(ST-36), 16-3(ST-41).

Use 5-6 recommended zones and locally on the affected skin for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10-12 days. It is recommended to repeat the therapy in 3 weeks during for 3 months. If pigmentations and eczema are present expose affected areas for 10 minutes.

6.22. Thromboangiitis obliterans (Buerger's Disease)

Buerger's disease is an episodic and segmental inflammatory and thrombotic process of the arteries and veins, principally in the limbs. The cause is not known. It is seen most commonly in men under 40 who smoke and is especially common in Ashkenazi Jews of Eastern European background. The inflammatory process is intermittent, with quiescent periods lasting weeks, months, or years. The arteries most commonly affected are plantar and digital vessels in the foot and those in the lower leg. The arteries in the hands and wrists may also become involved. Different arterial segments may become occluded in successive episodes; a certain amount of recanalization occurs during quiescent periods. Superficial migratory thrombophlebitis is a common early indication of the disease.

The principles of the therapy are the same as those outlined for atherosclerotic peripheral vascular disease, but the long-range outlook is better in patients with Buerger's disease, so that when possible the approach should be more conservative and tissue loss kept to minimum.

Recommended zones for electromagnetic exposure:

First day: 3-6(GB-20), 5-6(ST-16) left, 7-11(SP-12) – both sides, 16-3(ST-41) – both sides

Second day: 5-5(CV-17), 15-1(SP-6), 14-1(BL-40) – both sides, 14-3(BL-57) – both sides

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 3 weeks during 5-6 months.

6.23. Idiopathic arteritis of Takayasu (“Pulseless Disease”)

Pulseless disease, most frequent in young women, is an occlusive polyarteritis of unknown cause with special predilection for the branches of the aortic arch. It occurs most commonly in Asians. Manifestations, depending upon the vessel or vessels involved, may include evidence of cerebrovascular insufficiency, with transient ischemic attacks and visual disturbances; and absent pulses in the arms, with a rich collateral flow in the shoulder, chest, and neck areas. The most common clinical finding, however, is a bruit. The extent of the vascular involvement may defined by angiography.

Recommended zones for electromagnetic exposure

First day: 3-1(GV-20), 12-10(CV-7), 5-4(LU-2) – both sides, 5-5(CV-17), 16-1(ST-36)

Second day: 3-6(GB-20), 10-5(LI-11), 2-5(LI-18) –both sides, 5-6(ST-16) left side, 16-4(LR-3)

Use all the recommended zones for one therapeutic session daily, change the zones for first and second day. Expose for 5 minutes each area. The treatment course is 8-10 days. Repeat the treatment course in 3 weeks during 6 months.

6.24. Raynaud's disease

Raynaud's disease is the primary, or idiopathic form of paroxysmal digital cyanosis. The cause is not known, but some abnormality of sympathetic nervous system seems to be active in this entity. Raynaud's disease and Raynaud's phenomenon are characterized by intermittent attacks of pallor or cyanosis –or pallor followed by cyanosis – in the finger (and rarely the toes), precipitated by cold or occasionally emotional upsets. The condition may progress to atrophy of the terminal fat pads and the digital skin, and gangrenous ulcers may appear near the fingertips.

Informational radiowave therapy is directed to normalization of the functions of vascular, endocrine, and nervous systems, improvement of the protective functions of organism, of capillary circulation that improves blood supply to the tissues and prevents progression of the disease.

Recommended zones for electromagnetic exposure: 3-6(GB-20), 11-7(TE-1), 10-2(LI-15), 12-2(PC-3) right and left sides, 12-5(LU-7), 12-9(HT-7), 11-5(SI-2), 16-1(ST-36).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The treatment course is 10-12 days. It is recommended to repeat the therapy in 2-3 weeks during for 6 months. If atrophic lesions are present expose affected areas for 3 minutes on each area.

6.25. Lymphangitis & Lymphadenitis

Lymphangitis and lymphadenitis are common manifestations of a bacterial infection that is usually caused by hemolytic streptococci or staphylococci (or by both organisms) and usually arises from an area of cellulites, generally at the site of an infected wound. The wound may be very small or superficial, or an established abscess may be present, feeding bacteria into the lymphatics. The involvement of the lymphatics is often manifested by a red streak in the skin extending in the direction of the regional lymph nodes, which are, in turn, generally tender and enlarged. Systemic manifestations include fever, chills, and malaise. The infection may progress rapidly, often in a matter of hours.

Throbbing pain is usually present in the area of cellulitis at the site of bacterial invasion. Malaise, anorexia, sweating, chills, and fever of 37.8-40°C develop rapidly. The involved regional lymph nodes may be significantly enlarged and are usually quite tender. The pulse is often rapid.

Prompt treatment should include heat (hot, moist compresses or heating pad), elevation when feasible, and immobilization of the infected area. MINITAG® may be prescribed for pain.

Antibiotic therapy should always be instituted when local infection becomes invasive, as manifested by cellulitis and lymphangitis.

Recommended zones for electromagnetic exposure:

First day: 3-1(GV-20), 14-3(BL-57) – both sides, 15-8(KI-1) – both sides, 16-3(ST-41) – both sides;

Second day: 3-6(GB-20), 14-1(BL-40) – both sides, 17-1(LR-11) – both sides, 15-1(SP-6).

Use all the recommended zones for one therapeutic session daily, change the zones for first and second day. Expose for 5 minutes each area. The treatment course is 10-12 days. Repeat the course in 4 weeks during 5-6 months.

Chapter 7. Respiratory diseases

7.1. Epiglottitis

Epiglottitis in adults should be suspected when odynophagia seems out of proportion to pharyngeal findings. It may be viral or bacterial in origin. Unlike the case of children, indirect laryngoscopy is generally safe and may demonstrate the swollen, erythematous epiglottis. Initial treatment is hospitalization for intravenous antibiotics and dexamethasone. Steroids may be tapered as signs and symptoms resolve.

Recommended zones for electromagnetic exposure: 1-10(SI-18) *right and left sides*, **11-4**(LI-4), **12-11**(LU-11), **10-5**(LI-11), **4-9**(ST-6), **16-7**(ST-44), **2-4**(CV-23).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The duration of therapy is 8-10 days.

7.2. Acute laryngitis

Acute laryngitis is probably the most common cause of hoarseness, which may persist for a week or so after other symptoms of upper respiratory infection have cleared. The patient should be warned to avoid vigorous use of the voice (singing, shouting) while laryngitis is present, since this may foster the formation of vocal nodules. Although thought to be usually viral in origin, both *Moraxella catarrhalis* and *Haemophilus influenzae* may be isolated from the nasopharynx at higher than expected frequencies, and erythromycin may reduce the severity of hoarseness and cough.

Informational radiowave therapy is directed to prevent the complications.

Recommended zones for electromagnetic exposure: 8-1(GV-14), **2-4**(CV-23), **11-4**(LI-4), **10-5**(LI-11), **12-1**(LU-5), **16-2**(ST-40), **15-8**(KI-1).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The duration of treatment is 8-10 days.

7.3. Acute bronchitis

Symptoms of acute bronchitis include the symptoms of intoxication and the bronchial symptoms. The most important goal in the management is early treatment. Informational radiowave therapy is a method of choice since it strengthens protective functions of the organism, decreases toxic action of viruses, bacteria, its toxins, improves blood supply to the bronchi, relieves the symptoms of the bronchoobstruction and the progressing of the disease. Informational radiowave therapeutic sessions are prescribed 2-3 times daily for the first 2-3 days. Severe cases of acute bronchitis may require of the combination appropriate antibiotic or sulfonamides therapy with informational radiowave therapy.

Recommended zones for electromagnetic exposure: 8-2(BL-11), **12-1**(LU-5), **11-4**(LI-4), **15-5**(KI-2), **5-4**(LU-2), **16-1**(ST-36), **8-8**(BL-17), **16-2**(ST-40), **5-5**(CV-17).

Extra points

*When irritation of the trachea and larynx are present: 5-1(CV-22), **2-4**(CV-23), **15-1**(SP-6).*

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment. The duration of the treatment is 7-10 days.

7.4. Pneumonia

Pneumonia is a inflammation of the lung parenchyma characterized by consolidation of the affected part, the alveolar air spaces being filled with exudates, inflammatory cells, and fibrin. Most cases are due to infection by bacteria or viruses, a few to inhalation of chemicals or trauma to the chest wall, and a small minority to rickettsiae, fungi, and yeasts.

Pneumonia continues to be a major health problem despite the availability of potent antimicrobial drugs. Microorganisms gain access to the lower respiratory tract by aspiration of oropharyngeal secretions and associated bacterial flora, inhalation of infected aerosols, and hematogenous dissemination.

Pneumonias are classified as being either community-acquired or hospital-acquired (nosocomial).

The American Thoracic Society (1993) has proposed guidelines for the initial treatment of adults with community-acquired pneumonia, based upon limited use of diagnostic tests, categorizing the patient based on four variables (severity of illness, age, comorbid conditions, and need for hospitalization), and the use of empiric broad-spectrum antibiotic therapy. The most common pathogens are *Streptococcus pneumoniae*, *Mycoplasma pneumoniae*, respiratory viruses, *Chlamydia pneumoniae*, *Haemophilus influenzae*, and miscellaneous organisms (*Legionella*, *Staphylococcus aureus*, *Mycobacterium tuberculosis*, endemic fungi, and aerobic, gram-negative bacilli). Antibiotic treatment with a macrolide or a tetracycline is advised.

Hospital-acquired (nosocomial) pneumonia, defined as pneumonia occurring more than 48 hours after admission to the hospital, is a major cause of morbidity and mortality in hospitalized patients, especially those requiring mechanical ventilation. Nosocomial pneumonia is the second most common cause of hospital-acquired infection and has a mortality rate of about 30%. ICU-acquired pneumonia and pneumonia in patients being mechanically ventilated (“ventilator-associated pneumonia”) have even higher mortality rates of about 48%. The most common organisms responsible for nosocomial pneumonia are *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Enterobacter*, *Klebsiella pneumoniae*, and *Escherichia coli*. *Proteus*, *Serratia*, coagulase-negative *S aureus*, *Streptococcus*, and *Citrobacter* account for most of the remaining cases. Treatment of nosocomial pneumonia, like treatment of community-acquired pneumonia, is usually empiric.

The treatment of pneumonia should be complex with obligatory use of antimicrobial agents. Informational radiowave therapy increases the therapeutic effectiveness of medications, decreases its toxicity, enhances protective functions of the organisms and prevents the development of complications.

Recommended zones for electromagnetic exposure:

First day - **11-4**(LI-4), **8-2**(BL-11), **5-5**(CV-17), **12-5**(LU-7), **15-1**(SP-6), **8-4**(SI-14), **8-5**(BL-13), **8-6**(BL-43).

Second day - **8-1**(GV-14), **5-4**(LU-2) *left and right sides*, **12-6**(LU-9), **2-5**(LI-18), **5-8**(PC-1), **11-1**(TE-6), **6-1**(CV-15).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the therapy. The duration of the treatment is 15 days. Apply informational radiowave therapy twice daily for the first 7 days.

7.5. Chronic obstructive pulmonary disease (COPD)

Chronic obstructive pulmonary disease (COPD) is a disease state characterized by the presence of airflow obstruction due to chronic bronchitis or emphysema; the airflow obstruction is generally progressive, may be accompanied by airway hyperreactivity, and may be partially reversible (American Thoracic Society). Although emphysema and chronic bronchitis must be diagnosed and treated as specific diseases, most patients with COPD have features of both conditions.

Chronic bronchitis is characterized by excessive secretion of bronchial mucus and is manifested by productive cough for 3 months or more in at least 2 consecutive years in the absence of any other disease that might account for this symptom.

Emphysema denotes abnormal, permanent enlargement of air spaces distal to the terminal bronchiole, with destruction of their walls and without obvious fibrosis (American Thoracic Society). Cigarette smoking is clearly the most important cause of COPD. Air pollution, airway infection, familial factors, and allergy have also been implicated in chronic bronchitis, and hereditary factors (deficiency of α 1-antitrypsin) have been implicated in emphysema. The pathogenesis may be excessive lysis of elastin and other structural proteins in the lung matrix by elastase and other proteases derived from lung neutrophils, macrophages, and mononuclear cells. Atopy and the tendency for bronchoconstriction to develop in the response to nonspecific airway stimuli may be important risks for COPD.

Patients with COPD characteristically present in the fifth or sixth decade of life complaining of excessive cough, sputum production, and shortness of breath that have often been present for 10 years or more. Productive cough usually occurs in the morning. Dyspnea is noted initially only on extreme exertion, but as the condition progresses, it becomes more severe and occurs with mild activity.

Management strategies in COPD include discontinuance of cigarette smoking, education of the patient about his or her disease, relief of bronchospasm, aerosol therapy, chest physiotherapy, treatment of complications.

Treatment of chronic bronchitis

Informational radiowave therapy should be started early when patient was diagnosed, be individualized depending upon overall clinical picture. Patient with chronic bronchitis needs rehabilitation which includes adjunctive informational radiowave therapy twice a year (autumn, spring time) and on the time of increase acute viral infections.

Recommended zones for electromagnetic exposure: 5-1(CV-22), 8-2(BL-11), 8-1(GV-14), 11-4(LI-4), 5-5(CV-17), 12-1(LU-5), 16-1(ST-36), 15-1(SP-6).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment. The duration of the treatment is 7-10 days. It is recommended to repeat prophylactic course of therapy twice a year (spring, autumn).

Treatment of emphysema

Informational radiowave therapy is directed to relief of symptoms of congestive heart failure and respiratory failure.

Recommended zones for electromagnetic exposure: 6-2(CV-14), 12-6(LU-9), 5-4(LU-2), 8-5(BL-13), 10-6(LI-10), 5-3(CV-20), 6-1(CV-15), 15-1(SP-6), 11-2(TE-5), 5-5(CV-17).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment. The duration of the treatment is 10 days. It is recommended to repeat of therapy twice a year. On the stage of subcompensation it is necessary to hold therapeutic session daily.

7.6. Asthma

Asthma is a disease characterized by an increased responsiveness of the trachea and bronchi to various stimuli, and manifested by wide-spread narrowing of the airways that changes in severity either spontaneously or as a result of treatment. (American Thoracic Society). Asthma is characterized by such pathologic changes as hypertrophy of bronchial smooth muscle, mucosal edema and hyperemia, thickening of epithelial basement membrane, hypertrophy of mucous glands, acute inflammation, and plugging of airways by thick, viscid mucus. These changes result in obstruction of airways of all calibers. Asthma is now regarded primarily as a subacute inflammatory disease of airways. Multiple

complex mechanisms probably are involved in reversible airflow obstruction. Numerous cytokines derived from tissue mast cells, eosinophils, T lymphocytes, macrophages, and other lung cells are critical in initiating and perpetuating the asthmatic response. The sensitized tissue mast cell plays a pivotal role in asthma by degranulating and releasing mediators such as histamine, bradykinin, chemotactic factors, platelet-activating factor, and metabolites of arachidonic acid such as prostaglandins and leukotrienes. Neural factor may augment this response. These mediators act locally to effect bronchoconstriction, cellular infiltration, platelet activation, increased vascular permeability, edema, and increased secretion of mucus. Besides mast cells, other lung cells, including eosinophils, neutrophils, and lymphocytes, play important roles in the immunopathogenesis of airway inflammation in asthma. Airway narrowing in asthma results from a combination of smooth muscle spasm, airway edema and inflammation, and mucus plugging. Successful therapy depends upon reversing each of these factors.

Classification

Exercise-induced asthma occurs 5-10 minutes after the patient starts to exercise and may be related to heat loss or water loss from the bronchial surface.

Triad asthma, a combination of asthma, aspirin sensitivity, and nasal polyposis, occurs in fewer than 10% of asthma patients. Bronchoconstriction in this condition is due to the effects on arachidonic acid metabolism of aspirin and other nonsteroidal anti-inflammatory agents, tartrazine dyes, and other compounds.

Occupational asthma may be triggered by various agents found in the workplace and occurs a few weeks to many years after initial exposure to an offending agent. Nocturnal cough may be the only symptom. Cardiac asthma represents bronchospasm precipitated by congestive heart failure, probably as a result of vasodilation of blood vessels in small airways.

Asthmatic bronchitis denotes chronic bronchitis with features of bronchospasm that quickly responds to bronchodilator therapy.

Drug-induced asthma is caused by many commonly used agents.

Asthma is characterized by episodic wheezing, feelings of tightness in the chest, dyspnea, and cough. The frequency of asthma attacks is highly variable. Some patients may have very infrequent, brief attacks of asthma; others may suffer nearly continuous symptoms.

Management of ambulatory patients with asthma depends upon the severity of the disease. Emphasis must be given to patient education, environmental control, smoking cessation, proper use of metered-dose inhalers, and use of anti-inflammatory therapy.

Informational radiowave therapy as nonspecific action on integral organism is very effective for acute and chronic obstruction lung disease such as bronchial asthma, chronic bronchitis. Informational radiowave therapy is effective for rapid relief of symptoms of bronchial asthma and for long-term therapy. If acute or chronic inflammatory process is present it is necessary to add antibacterial agents also. The complex treatment is more effective than monotherapy.

***Recommended zones for electromagnetic exposure for acute attack: 10-5(LI-11), 5-4(LU-2),
2-6(ST-10), 5-1(CV-22),
12-4(PC-6), 12-6(LU-9),
5-5(CV-17).***

Use all the recommended zones. Expose for 5 minutes each area.

For treatment of bronchial asthma as secondary prophylaxis and rehabilitation use:

***Recommended zones for electromagnetic exposure: 3-6(GB-20), 5-2(KI-27), 10-5(LI-11), 8-6(BL-43),
15-3(KI-3), 6-1(CV-15), 5-3(CV-20), 12-5(LU-7),
6-4(LR-14), 12-6(LU-9), 6-3(ST-19).***

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment. The duration of the treatment is 10-12 days. It is recommended to repeat therapy

in 2 weeks during 6 months. It is good to combine with exercise therapy, massage, respiratory exercises and other methods of physical exercises. During the therapy patient should be avoided of supercooling and acute infections diseases.

7.7. Pneumoconioses

Pneumoconioses are chronic fibrotic lung diseases caused by the inhalation of coal dust and various inert, inorganic, or silicate dusts. Pneumoconioses due to inhalation of inert dusts are usually asymptomatic disorders with diffuse nodular infiltrates on chest x-ray.

Clinically important pneumoconioses include coal workers' pneumoconiosis, silicosis, and asbestosis. Treatment for each is supportive.

Coal Worker's Pneumoconiosis: In coal worker's pneumoconiosis, ingestion of inhaled coal dust by alveolar macrophages leads to the formation of coal macules, usually 2-5 mm in diameter, which appear on chest x-ray as diffuse small opacities but are especially prominent in the upper lung. Cigarette smoking does not increase the prevalence of coal worker's pneumoconiosis but may have an additive detrimental effect on ventilatory function. **Caplan's syndrome** is a rare condition characterized by the presence of necrobiotic rheumatoid nodules (1-5 cm in diameter) in the periphery of the lung in coal workers with rheumatoid arthritis.

Silicosis: In silicosis, extensive or prolonged inhalation of free silica particles in the respirable range (0.3-5µm) causes the formation of small rounded opacities (silicotic nodules) throughout the lung. Calcification of the periphery of hilar lymph nodes ("eggshell" calcification) is an unusual finding that strongly suggests silicosis. The incidence of tuberculosis is increased in patients with chronic silicosis.

Asbestosis: Asbestosis, a nodular interstitial fibrosis occurring in asbestos workers and miners, is characterized by dyspnea, inspiratory crackles, and in some cases, clubbing and cyanosis. Cigarette smoking in asbestos workers increases the prevalence of radiographic pleural and parenchymal changes and markedly increases the incidence of lung carcinoma. It may also interfere with the clearance of short asbestos fibers from the lung.

Recommended zones for electromagnetic exposure: **11-4**(LI-4), **16-1**(ST-36), **5-4**(LU-2) right and left sides, **10-5**(LI-11), **15-2**(KI-7), **12-5**(LU-7), **2-4**(PC-6), **12-6**(LU-9), **16-5**(LR-2), **5-5**(CV-17).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment. The duration of the treatment is 10-12 days. It is recommended to repeat the treatment course in 2 weeks during 6-8 months.

Chapter 8. Gastrointestinal diseases

8.1. Gingivitis

Gingivitis is the inflammation of the gingival margin. There are catarrhal, hypertrophic, ulcerative gingivitis. The causes may be various – mechanical trauma of gingival (dental tartar, dentures), smoking, chemicals, immunodeficiency.

The combination informational radiowave therapy with local treatment reduce the symptoms and shorten the time of recovery.

Recommended zones for electromagnetic exposure: 2-2(ST-3), **2-1**(GV-26), **10-5**(LI-1), **4-9**(ST-6), **2-3** (CV-24), **16-1**(ST-36).

Use all the recommended zones for one procedure. Attach for 5 minutes for each zone. The treatment course is 5-10 days. If it is necessary informational radiowave therapy may be repeated in 2 weeks.

8.2. Glossitis

Glossitis is the inflammation of the tongue. It can be acute or chronic. Glossitis may be primary or be the symptom of other disease. The causes are various: infection, trauma –mechanical, thermal, or chemical, allergy (toothpaste, dye, plastics of the denture, tooth filling, and other), avitaminosis (B-vitamin deficiency), anemia, skin diseases.

Specific forms of glossitis need specific treatment. Patient should avoid the irritants and allergic agents. Food is recommended to be soft and cold. The patient should stick to thorough hygiene of oral cavity.

Recommended zones for electromagnetic exposure: 2-4 (CV-23), **10-5**(LI-11), **16-1**(ST-36), **4-8**(GB-12), **2-5**(LI-18).

Use all the recommended zones for one therapeutic session. Attach for 5 minutes for each zone. The treatment course is 10 days. It is may be repeated in 2 weeks.

8.3. Stomatitis

Inflammation of the mucous membrane of the mouth; it can be associated with systemic disease (acute infection, skin diseases, hematologic diseases, avitaminosis). Lesions may consist of erythema, vesicles, bullae, ulcerations, or edema. Foul smelling and bloody saliva may accompany ulcerative lesions.

Recommended zones for electromagnetic exposure: 4-10(ST-5), **2-2**(ST-3), **2-1**(GV-26), **2-3**(CV-24), **10-5**(LI-11), **12-2**(PC-8).

Use all the recommended zones for each informational radiowave procedure. Attach for 5 minutes for each zone. The treatment course is 10 days.

If it is necessary repeat the course in 2 weeks.

8.4. Mucocele

Mucocele is the mucous cyst localized on lower lip. It results from traumatic impairment of small salivary ducts. The saliva gets into the surrounding tissues with mucin containing in it. (mucin – mucous) Later soft nodule develops. If the cyst localized superficially it has bluish color because the epithelium that covers the cyst becomes thinner.

It is possible to use informational radiowave therapy conservatively if no long time passed (not more than 5-6 months). If longer period passed patient needs surgical treatment.

Apply the apparatus 2-3 mm above the cyst. One therapeutic session should last 10-15 minutes. The treatment course is 10-12 days.

8.5. Periodontitis

A chronic inflammatory disease of the periodontium occurring in response to bacterial plaque on the adjacent teeth; characterized by gingivitis, destruction of the alveolar bone and periodontal ligament, apical migration of the epithelial attachment resulting in the formation of periodontal pockets, and ultimately loosening and exfoliation of the teeth. There two types of causes of periodontitis. General causes are avitaminosis, gastrointestinal diseases and other. Local causes include poor hygiene of oral cavity, incongruent denture, trauma, dental tartar.

Treatment should be combined with local treatment.

Recommended zones for electromagnetic exposure: 16-1(ST-36), ***10-5***(LI-11), ***16-5***(LI-2)

upper jaw involvement: 2-1(GV-26), ***2-7***(GV-28), ***2-2***(ST-3)

lower jaw involvement: 4-9(ST-36), ***4-10***(ST-5), ***2-3***(CV-24)

Use all the recommended zones every day. Apply 5 minutes for each zone and also locally above the lesion for 3-5 minute. The treatment course is 10 days.

The treatment course may be repeated in 2 weeks.

8.6. Toothache

The MINITAG® may be used to reduce the pain when patient has deep caries, pulpitis, periodontitis, after root canal filling.

Recommended zones for electromagnetic exposure: 12-2(PC-8), ***8-4***(SI-14), ***11-4***(LI-4), ***4-7***(TE-17),
4-6(GB-2), ***2-2***(ST-3).

Use all the recommended zones for one therapeutic session. Attach for 5 minutes for each zone and also locally on affected tooth for 3-5 minutes.

8.7. Esophagitis

The inflammatory disease of esophagus may occur due injurious agents (mechanical, chemical, radiolesion), burns and secondary infection. Symptoms, clinical course and prognosis of esophagitis depends upon level of esophageal involvement and degree of damage. Typical symptoms include restrosteral pain on swallowing, burning pain, regurgitation of food, liquids, blood, nausea, and vomiting. Informational radiowave therapy should be started as soon after establishing the cause of esophagitis.

Infectious esophagitis occurs most commonly in immunosuppressed patients. Patients with AIDS, solid organ transplants, leukemia, lymphoma, and those receiving immunosuppressive drugs are at particular risk of opportunistic infections. Candida albicans, herpes simplex, and cytomegalovirus are the most common pathogens. Candida infection may also occur in patients who have uncontrolled diabetes and those being treated with systemic corticosteroids, radiation therapy, or systemic antibiotic therapy.

The most common symptoms are oodynophagia and dysphagia. Substernal chest pain occurs in some patients. Patients with candidal esophagitis are sometimes asymptomatic.

The treatment is directed on treatment of the cause of esophagitis. It could be specific treatment of candidal or viral infections.

Recommended zones for electromagnetic exposure: 6-6(CV-12), 16-1(ST-36), 12-5(LU-7), 8-7(BL-15), 5-2(KI-27), 15-1 (SP-6), 5-1(CV-22).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 7-10 days. It is recommended to repeat treatment course in 4 weeks.

8.8. Esophageal varices

Esophageal varices are dilated submucosal veins that develop in patients with underlying portal hypertension and may result in serious upper gastrointestinal bleeding. Under normal circumstances, there is a 2-6 mm Hg pressure gradient between the portal vein and the inferior vena cava. When the gradient exceeds 10 mmHg, significant portal hypertension exists. Esophageal varices are the most common cause of important gastrointestinal bleeding due to portal hypertension, though gastric varices and, rarely, intestinal varices and, rarely, intestinal varices may also bleed. Bleeding from esophageal varices most commonly occurs in the distal 5 cm of the esophagus.

The most common cause of portal hypertension is cirrhosis. Patients with esophageal varices that develop bleeding present with symptoms and signs of acute gastrointestinal bleeding. Most commonly, patients present with spontaneous emesis of either bright red blood or “coffee grounds” material which is typically accompanied by melena or hematochezia. Rarely, varices present with hematochezia or melena alone in the absence of hematemesis.

Rapid patient assessment and resuscitation with fluids or blood products is essential.

Informational radiowave therapy is applied to prevent bleeding esophageal varices. The management of cirrhosis is necessary to combine with informational radiowave therapy. The therapy is cyclical. The cycle consists of 7-10 sessions in 4-6 months. If symptoms persist the breaks may be shorten.

Recommended zones for electromagnetic exposure: 16-4(LR-3), 6-4(LR-14), 6-5(GB-24), 15-4(KI-6), 13-1(GB-34), 12-4(PC-6), 5-1(CV-22).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 7-10 days. It is recommended to repeat therapy every 4 weeks and hold prophylaxis course twice a year.

8.9. Mallory-Weiss syndrome (Mucosal Laceration of gastroesophageal junction)

Mallory-Weiss syndrome is characterized by nonpenetrating mucosal tear at the gastroesophageal junction which is hypothesized to arise from events that suddenly raise transabdominal pressure, such as lifting, retching, or vomiting. Alcoholism is a strong predisposing factor. Mallory-Weiss tears are responsible for approximately 5% of cases of upper gastrointestinal bleeding.

Patients usually present with hematemesis with or without melena. A history of antecedent retching, vomiting, or straining is obtained in about 50% of cases.

Patients are initially treated as needed with fluid resuscitation and blood transfusions. Most patients stop bleeding spontaneously and require no therapy.

The therapy is nonspecific, has sufficient therapeutic effect and does not require pharmacologic agents. From the first days of disease the symptoms subside. The pain relieves during therapeutic session, and completely disappears after 3rd –5th day of treatment, rare after 6th –7th day.

Recommended zones for electromagnetic exposure: 8-7(BL-15), 8-8(BL-17), 5-5(CV-17), 12-6(LU-9), 5-3(CV-20), 5-6(ST-16).

For acute esophageal spasm with food retention accompanied by vomiting: 12-(LU-5), 16-1(ST-36), 15-1(SP-6), 8-5(BL-13), 6-5(GB-24), 6-1(CV-15).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 7-10 days.

8.10. Achalasia

Achalasia is an idiopathic motility disorder characterized by loss of peristalsis in the distal two-thirds (smooth muscle) of the esophagus and impaired relaxation of the lower esophageal sphincter. There appears to be denervation of the esophagus resulting from loss of ganglion cells in Auerbach's plexus and degeneration of the vagus nerve and dorsal motor nucleus.

Symptoms usually develop in patients between the ages of 25 and 60 years. Patients complain of the gradual onset of dysphagia for solid foods and, in the majority, of liquids also. Symptoms at presentation may have persisted for months to years. Substernal discomfort or fullness may be noted after eating. Many patients eat more slowly and adopt specific maneuvers such as lifting the neck or throwing the shoulders back in order to enhance esophageal emptying. Regurgitation of undigested food is common and may occur during meals or up to several hours later.

If treatment is provided before marked esophageal dilation develops, swallowing is near normal in most patients.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 5-5(CV-17), 6-2(CV-14), 3-6(GB-20), 16-1(ST-36), 6-8(LR-13), 12-9(HT-7), 12-6(LU-9).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment is 10 days. It is recommended to do prophylactic course twice a year, then continue twice a year.

8.11. Erosive & hemorrhagic gastritis

The most common causes of erosive gastritis are drugs (especially NSAIDs), alcohol, stress due to severe medical or surgical illness ("stress gastritis"), and portal hypertension ("portal gastropathy"). Uncommon causes include caustic ingestion and radiation. Erosive and hemorrhagic gastritis typically are diagnosed at endoscopy, often being performed because of dyspepsia or upper gastrointestinal bleeding. Endoscopic findings include subepithelial hemorrhages, petechiae, and erosions. Erosive gastritis is usually asymptomatic. Symptoms, when they occur, include anorexia, epigastric pain, nausea, and vomiting. There is poor correlation between symptoms and the number or severity of endoscopic abnormalities.

Informational radiowave therapy is very effective in the treatment of erosive gastritis since it has following nonspecific effects such as analgesia, normalization of nervous system, motor and secretory functions of stomach, anti-inflammatory and antiallergic effects.

Recommended zones for electromagnetic exposure: 9-1(BL-21), 6-6(CV-12), 16-1(ST-36), 6-3(ST-19), 15-1(SP-6), 7-2(ST-25).

Extra points:

For malaise, neurotic manifestations (irritability), disorders of the motor and secretory functions of stomach: 3-6(GB-20), 12-10(PC-7), 3-1(GV-20), 12-9(HT-7);

For hypo- and hyperacidity: 5-11(SP-17), 15-6(SP-4);

For heartburn and sour regurgitation: 5-7(KI-23), 6-4(LR-14), 7-3(CV-8).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each recommended zone and painful area. Change the zones during the treatment course. The duration of the treatment is 7-10 days. It is recommended to hold therapeutic session twice a day. Chronic gastritis requires repeated treatment course in 4 weeks.

8.12. Peptic ulcer disease

Peptic ulcer is a break in the gastric or duodenal mucosa that arises when the normal mucosal defensive factors are impaired or are overwhelmed by aggressive luminal factors such as acid and pepsin. Three major causes of peptic ulcer disease are now recognized: NSAIDs, chronic *H pylori* infection, and acid hypersecretory states such as Zollinger-Ellison syndrome.

Ulcer symptoms characterized by rhythmicity and periodicity. 10-20% of patients present with ulcer complications without antecedent symptoms. Upper endoscopy with antral biopsy for *H pylori* is diagnostic procedure of choice in most patients. Gastric ulcer biopsy or documentation of complete healing necessary to exclude gastric malignancy.

Epigastric pain (dyspepsia), the hallmark of peptic ulcer disease, is present in 80-90% of patients. Pain is typically well localized to the epigastrium and not severe. It is described as gnawing, dull, aching, or "hunger-like". Most patients have symptomatic periods lasting up to several weeks with intervals of months to years in which they are pain-free (periodicity).

Patients should be encouraged to eat balanced meals at regular intervals. Moderate alcohol intake is not harmful. Smoking retards the rate of ulcer healing and increases the frequency of recurrences and should be discouraged.

Applying of the informational radiowave therapy may relieve the pain syndrome on first 3-6 days of the treatment. Though the informational radiowave therapy has nonspecific action it may provide positive effects on etiological and pathogenic factors of the disease, restore functions of central nervous system, immune system, relieve pain and spasm, eliminate motor and secretion disorders, stimulate tissue trophism, healing of the peptic ulcer and etc.

The comparison of therapeutic evidence of gastric and duodenal peptic ulcer with pharmacologic agents with informational radiowave therapy shows that duodenal ulcers have an efficient advantage.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 5-5(CV-17), 12-9(HT-7), 6-6(CV-12), 16-1(ST-36), 8-6(BL-43), 9-1(BL-21).

Extra points:

For melena: 5-11(SP-17);

For hyper- hyposecretion, gastroduodenitis, chronic gastritis, spasmodic pain, stomach tumor:

15-6(SP-4), 6-6(CV-12), 6-5(GB-24), 12-1(LU-5), 12-4(PC-6);

For hyperperistalsis, bloody diarrhea, vomiting: 6-7(KI-19);

For malaise, anorexia, gastric spasms: 11-2(TE-5);

*Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment is 10-12 days. It is recommended to hold therapeutic sessions twice daily if the pain and other symptoms are apparent. **All patients after last therapeutic session require endoscopic examination.***

It is recommended to hold refresher prophylactic informational radiowave therapy 2-3 times a year.

In trial with the help of informational radiowave therapy of peptic ulcer disease the ulcer recurrence rate decrease on 5-7 times than after standard therapies. For rapid relief of the symptoms of peptic ulcer is sufficient 3-4 therapeutic sessions on the first days of the exacerbations of the disease.

8.13. Nausea & Vomiting

Nausea is a vague, intensely disagreeable sensation of sickness or “queasiness” that may or may not be followed by vomiting. It should be distinguished from anorexia.

The history and physical examination are important in distinguishing among the causes of vomiting. Acute symptoms without abdominal pain are typically caused by food poisoning, infectious gastroenteritis, or drugs. Inquiry should be made into recent changes in medications, food ingestions, other viral symptoms of malaise or diarrhea, or similar illnesses in family members. The acute onset of severe pain and vomiting suggests peritoneal irritation, acute intestinal obstruction, or pancreaticobiliary disease. Examination may reveal fever, focal tenderness, guarding, or rebound tenderness. More chronic vomiting suggests pregnancy, gastric outlet obstruction, gastroparesis, intestinal dysmotility, psychogenic disorders, and central nervous system or systemic disorders. Thus nausea and vomiting are the symptoms of gastrointestinal disease. Informational radiowave therapy is effective as the symptomatic treatment as a nonspecific method of therapy. In both cases the effects of the action go on the integral organism. So the action of informational radiowave therapy is directed on the active points of central nervous system and the ganglions of vegetative system.

Recommended zones for electromagnetic exposure:

for nausea: 1-1(GV-24), 3-6(GB-20), 16-3(ST-41), 6-6(CV-12), 15-6(SP-4), 5-2(KI-27), 12-2(PC3), 11-7(TE-1).

Extra points

For severe nausea: 12-9(HT-7);

For morning nausea: 10-1(TE-14);

For nausea of biliary origin: 6-5(GB-24) right side;

For nausea accompanied with bitter taste and dizziness: 9-10(GB-30);

For nausea with aversion to sour food: 5-6(ST-16);

For nausea accompanied with belching: 5-4(LU-2);

Recommended zones for electromagnetic exposure:

for vomiting: 7-2(ST-25), 13-5(GB-40), 7-10(ST-30), 11-2(TE-5), 2-3(CV-24).

Extra points

For vomiting of nervous origin – 6-6(CV-12);

For severe vomiting - 11-2(TE-5), 7-1(GB-26), 15-1(SP-6);

For dizziness – 2-6(ST-10), 11-4(LI-4);

For tendency to fainting – 12-5(LU-7);

For indigestion - 18-4(SP-9);

For severe thirst - 8-6(BL-43), 6-1(CV-15), 9-1(BL-21);

For diarrhea – 12-1(LU-5), 6-6(CV-12), 6-2(CV-14);

For bilious vomiting of food - 5-5(CV-17);

For bilious vomiting – 12-7(HT-5), 8-2(BL-11), 8-8(BL-17), 12-4(PC-6), 7-2(ST-25);

For hematemesis – 6-8(LR-13), 6-7(KI-19);

For intoxication - 10-2(LI-15), 7-1(GB-26);

For dyspepsia - 6-6(CV-12), 15-1(SP-6), 14-1(BL-40);

For sea sickness – 16-4(LR-3), 6-7(KI-19), 12-9(HT-7).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment is 10-12 days. It is recommended to hold therapeutic sessions until symptoms disappear.

8.14. Dyspepsia

Dyspepsia is an imprecise term that refers to a host of upper abdominal or epigastric symptoms such as pain, discomfort, fullness, bloating, early satiety, belching, heartburn, regurgitation, or, simply, “indigestion”. It occurs in one-fourth of the adult population; though most never seek medical attention for this complaint. Even so, it is one the most common medical complaints, accounting for 3% of general medical office visits.

Etiology: A wide variety of disorders may cause dyspepsia:

Drug intolerance (aspirin, NSAIDs, antibiotics (metronidazole, erythromycin), cortocosteroids, digoxin, theophylline, iron, narcotics, alcohol, and caffeine).

Luminal gastrointestinal tract dysfunction: Of patients with dyspepsia who undergo endoscopy, gastroesophageal reflux disease is present in 5-15% and peptic ulcer disease in 15-25%. Gastric cancer is identified in 1% but is rare in persons under age 45 years. Other causes include gastroparesis (especially in diabetes mellitus), lactose intolerance and malabsorptive conditions, and parasitic infection (*Giardia*, *Strongyloides*).

Pancreatic disease. Pancreatic carcinoma, chronic pancreatitis.

Biliary tract disease. The abrupt, severe pain of Biliary colic due to cholelithiasis or choledocholithiasis should be distinguishable from dyspepsia in most instances.

Other conditions: diabetes mellitus, thyroid disease, coronary ischemia, collagen vascular disease, intra-abdominal malignancy, and pregnancy, among others.

Functional or “nonulcer” dyspepsia: this is the most common cause of chronic dyspepsia. Up to two-thirds of dyspeptic patients have no obvious organic or biochemical cause for their symptoms that can be determined by upper endoscopy or abdominal ultrasonography. Symptoms may arise from a complex interaction of increased visceral afferent sensitivity, delayed gastric emptying or impaired accommodation to food, or psychosocial stressors.

The informational radiowave therapy may relieve the symptoms on pre-clinical stage since dyspepsia occur due to organic and functional disturbances. The informational radiowave therapy may be used as symptomatic (analgesic) method until the underlying cause is not detected. For subsequent treatment the informational radiowave therapy is applied for management of underlying disorder.

Recommended zones for electromagnetic exposure: 16-7(ST-44), 15-8(KI-1), 5-3(CV-20), 6-2(CV-14);

Extra points

For constant epigastric pain - 11-6(HT-9);

For severe epigastric pain and thirst - 9-4(BL-52);

For epigastric pain during on eating - 6-6(CV-12), 6-3(ST-19);

For chronic epigastric pain - 6-2(CV-14);

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area.

8.15. Acute & chronic cholecystitis. Choledocholithiasis & cholangitis

Cholecystitis is associated with gallstones in over 90% of cases. It occurs when a stone becomes impacted in the cystic duct and inflammation develops behind the obstruction. Acalculous cholecystitis should be considered when unexplained fever or right upper quadrant pain occurs within 2-4 weeks of major surgery or in a critically ill patient who has had no oral intake for a prolonged period. Primarily as a result of ischemic changes secondary to distention, gangrene may develop, resulting in perforation.

Acute cholecystitis caused by infectious agents (eg, cytomegalovirus, cryptosporidiosis, or microsporidiosis) may occur in patients with AIDS.

The acute attack is often precipitated by a large or fatty meal and is characterized by the relatively sudden appearance of severe, steady pain which is localized to the epigastrium or right hypochondrium and which in the uncomplicated case may gradually subside over a period of 12-18 hours. Vomiting occurs and affords variable relief. Right upper quadrant abdominal tenderness is almost always present and is usually associated with muscle guarding and rebound pain. Fever is usually present.

Acute cholecystitis will usually subside on a conservative regimen (withholding of oral feedings, intravenous alimentation, analgesics, and antibiotics). Operation is mandatory when there is evidence of gangrene or perforation.

Chronic cholecystitis is characterized pathologically by varying degrees of chronic inflammation of the gallbladder. Calculi are usually present. Attacks of biliary colic may persist for as long several hours or be as brief as 15-20 minutes. Pain may be referred to the interscapular area or shoulder. Fatty food intolerance, belching, flatulence, a sense of epigastric heaviness, upper abdominal pain of varying intensity, and heartburn are often erroneously considered to be suggestive of cholelithiasis and cholecystitis but are usually not relieved by cholecystectomy.

Surgical treatment is indicated the same as for acute cholecystitis.

About 15% of patients with gallstones have choledolithiasis. The percentage rises with age, and the frequency in elderly people with gallstones may be as high as 50%. Common duct stones usually originate in the gallbladder but may also form spontaneously in the common duct postcholecystectomy. The stones are frequently "silent" as no symptoms result unless there is obstruction. A history suggestive of biliary colic or prior jaundice may be obtained. Biliary colic results from rapid increases in common bile duct pressure due to obstructed bile flow. The additional features that suggest the presence of a common bile stone are (1) frequently recurring attacks of right upper abdominal pain that is severe and persists for hours; (2) chills and fever associated with severe colic; and (3) a history of jaundice associated with episodes of abdominal pain. The combination of pain, fever (and chills), and jaundice represents the classic picture of cholangitis.

Recommended zones for electromagnetic exposure: 3-1(GV-20), ***3-6***(GB-20), ***6-8***(LR-13) *right and left sides, 12-10*(PC-7), ***6-6***(CV-12), ***7-3***(CV-8), ***7-4***(CV-6), ***6-5***(GB-24), ***16-5***(LR-2), ***10-5***(LI-11).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment is 10-12 days. It is recommended to repeat the 6th days treatment course in chronic cholecystitis in 2 weeks during for 3 months.

8.16. Hepatitis

Inflammation of the liver, due usually to viral infection but sometimes to toxic agents. It may be acute or chronic process.

The specific viruses causing viral hepatitis are: 1) hepatitis A virus (HAV); 2) hepatitis B virus (HBV); 3) The 3 most common types of viral hepatitis (A, B and C) afflict millions worldwide. Acute viral hepatitis characterized by varying degree of fever, malaise, weakness, anorexia, nausea, and abdominal distress. Hepatocellular damage causes bilirubin retention, often with jaundice, and a rise in serum levels of certain enzymes (particularly transaminases).

Hepatitis A, caused by an enterovirus, is spread by the fecal-oral route, most often through ingestion of contaminated food or water. The case fatality rate is less than 1%, and recovery is complete. The presence of antibody to hepatitis A virus indicates prior infection, noninfectivity, and immunity to future attacks.

Hepatitis B, due to a small DNA virus, is transmitted through sexual contact, sharing of needles by IV drug abusers, needlestick injuries among health care workers, and from mother to fetus. The

incubation period is 6-24 weeks. Some patients become carriers, and in some an immune response to the virus induces a chronic phase leading to cirrhosis, hepatic failure, and risk of hepatocellular carcinoma. Hepatitis B surface antigen (HbsAg) is detectable early in serum; its persistence correlated with chronic infection and infectivity. Core antigen (HbcAg) appears later and also indicates infectivity.

Hepatitis C is the principal form of transfusion-induced hepatitis; a chronic active form often develops.

Acute infection with hepatitis B or C has a higher mortality rate than hepatitis A. Effective vaccines are available for active immunization against hepatitis A and hepatitis B.

Hepatitis D is due to an RNA virus capable of causing disease only in persons previously infected with hepatitis B.

Hepatitis E, which occurs chiefly in the tropics, resembles hepatitis A in that it is transmitted by the fecal-oral route and does not become chronic or lead to a carrier state, but it has a much higher mortality rate.

hepatitis C virus (HCV); hepatitis D virus (delta agent); 5) hepatitis E virus (an enterically transmitted hepatitis seen in epidemic form in Asia, North Africa and Mexico).

Applying of informational radiowave therapy in combination with other methods for relieving of the organism intoxication arrests the further development of the disease and leads to complete cure.

Disintoxicational, immunomodulatory and other nonspecific action of the informational radiowave therapy promotes positive clinical outcome.

Recommended zones for electromagnetic exposure:

First day - 16-1(ST-36), 15-6(SP-4), 15-3(KI-3), 16-5(LR-2), 3-1(GV-20), 4-3(TE-20),

Second day - 6-6(CV-12), 12-2(PC-3), 12-9(HT-7), 5-10(GB-23), 7-2(ST-25), 6-8(LR-13) right side.

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of treatment is 10-12 days. It is recommended to repeat the therapy in 7 days during 2 months.

8.17. Chronic hepatitis

Chronic hepatitis is defined as a chronic inflammatory reaction of the liver or more than 3-6 months' duration, as demonstrated by persistently abnormal serum aminotransferase levels and characteristic histologic findings. The causes of chronic hepatitis include HBV, HCV, and HDV, autoimmune hepatitis, chronic hepatitis associated with certain medications (including methyldopa and isoniazid), Wilson's disease, $\alpha 1$ –antiprotease ($\alpha 1$ – antitrypsin) deficiency, and hemochromatosis. Traditionally, chronic hepatitis has been categorized histologically as chronic persistent hepatitis and chronic active hepatitis.

Activity should be modified according to the patient's symptoms, but strict bed rest is not necessary. The diet should be well balanced, without specific limitations other than sodium or protein restriction as dictated by fluid overload or encephalopathy.

Alcoholic hepatitis is characterized by acute or chronic inflammation and parenchymal necrosis of the liver induced by alcohol. While alcoholic hepatitis is often a reversible disease, it is the most common precursor of cirrhosis in the USA, and cirrhosis ranks among the most common causes of death of adults in this country.

The frequency of alcoholic cirrhosis is estimated to be about 8-15% among persons who consume an average of 120 g of alcohol (8 oz of 100-proof whiskey, 30 oz of wine, or eight 12-oz cans of beer) daily for over 10 years.

Only liver biopsy can establish the diagnosis with certainty, since any of the clinical and biochemical manifestations of alcoholic hepatitis can be seen in alcoholic fatty liver or cirrhosis, as well as liver disease due to other causes.

A recent period of heavy drinking, complaints of anorexia and nausea, and the demonstration of hepatomegaly and jaundice strongly suggest the diagnosis. Abdominal pain and tenderness, splenomegaly, ascites, fever, and encephalopathy may be present. Discontinue all alcoholic beverages. During periods of anorexia, every effort should be made to provide sufficient amounts of carbohydrates and calories to reduce endogenous protein catabolism and to promote gluconeogenesis and prevent hypoglycemia.

Recommended zones for electromagnetic exposure: 8-8 (BL-17), **12-2**(PC-3), **12-9**(HT-7), **16-5**(LR-2), **6-5** (GB-24) *right side*, **16-1**(ST-36).

Use all the recommended treatment zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. Repeat the therapy each month during 6 months.

8.18. Cirrhosis. Drug- & toxin-induced liver disease. Fatty liver & nonalcoholic steatohepatitis

Cirrhosis is the end result of hepatocellular injury that leads to both fibrosis and nodular regeneration throughout the liver. Cirrhosis is a serious and irreversible disease and is the eleventh leading cause of death in the USA. The clinical features of cirrhosis result from hepatic cell dysfunction, portosystemic shunting, and portal hypertension.

The most common histologic classification divides cirrhosis into micronodular, macronodular, and mixed forms. These are descriptive terms rather than separate diseases, and each form may be seen in the same patient at different stages of the disease.

In micronodular cirrhosis, the regenerating nodules are no larger than original lobules, ie, approximately 1mm in diameter or less.

Macronodular cirrhosis is characterized by larger nodules, which can measure several centimeters in diameter and may contain central veins. This form corresponds more or less to postnecrotic (posthepatic) cirrhosis but does not necessarily follow episodes of massive necrosis and stromal collapse.

Mixed macro- and micronodular cirrhosis signifies that features of cirrhosis are variable.

The onset of symptoms may be insidious or, less often, abrupt. Weakness, fatigability, muscle cramps, and weight loss are common. Anorexia is usually present and may be extreme with associated nausea and occasional vomiting. Abdominal pain may be present and is related either to hepatic enlargement and stretching of Glisson's capsule or to the presence of ascites.

The most important principle of treatment is abstinence from alcohol. The diet should be palatable, with adequate calories and protein (75-100 g/d) and, if there is fluid retention, sodium restriction.

The continuing synthesis, testing, and introduction of new drugs into clinical practice has resulted in an increase in toxic reactions of many types. Many widely used therapeutic agents may cause hepatic injury. The diagnosis of drug-induced liver injury is not always easy. Drug-induced liver disease can mimic viral hepatitis or biliary tract obstruction. In any patient with liver disease, the clinician must inquire carefully about the use of potentially hepatotoxic drugs or exposure to hepatotoxins. Drug toxicity may be categorized on the basis of pathogenesis or histologic appearance.

Examples include acetaminophen, alcohol, carbon tetrachloride, chloroform, heavy meals, mercaptopurine, phosphorus, tetracyclines, valproic acid, and vitamin A.

It was formerly believed that malnutrition rather than ethanol was responsible for **hepatic steatosis** (fatty liver) in the alcoholic. It is now clear, however, that ethanol is hepatotoxic in the absence of malnutrition. Nevertheless, inadequate diets – specifically, those deficient in choline, methionine, and dietary protein – can contribute to liver damage caused by ethanol.

Other nonalcoholic causes of steatosis are obesity (the commonest cause), starvation, diabetes mellitus, corticosteroids, poisons (carbon tetrachloride and yellow phosphorus), endocrinopathies such as Cushing's syndrome, hyperlipidemia, and total parenteral nutrition.

There are apparently at least five factors, acting in varying combinations, that are responsible for the accumulation of fat in the liver:

Increased mobilization of fatty acids from peripheral adipose depots;

Decreased utilization or oxidation of fatty acids by the liver;

Increased hepatic fatty acid synthesis;

Increased esterification of fatty acids into triglycerides;

Decreased secretion or liberation of fat from the liver.

Treatment consists of removing or modifying the offending factor.

Informational radiowave therapy of the compensated cirrhosis is efficient as the monotherapy.

The management of active decompensated cirrhosis requires the combination of informational radiowave therapy with pharmacological agents, bed rest and care at hospital.

Informational radiowave therapy promotes the normalization of the metabolism in hepatocytes and biliary system affected by mentioned factors.

Recommended zones for electromagnetic exposure: 16-5(LR-2), 16-4(LR-3), 6-8(LR-13), 6-5(GB-24) right side, 16-1(ST-36), 8-8(BL-17).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. Repeat the treatment course every month during 6 months. When other symptoms develop (vomiting, diarrhea, itching and etc) it is necessary to use other methods of treatment.

8.19. Acute pancreatitis

Acute inflammation of the pancreas accompanied by the formation of necrotic areas and hemorrhage into the substance of the gland. Clinically marked by sudden severe abdominal pain, nausea, fever, and leucocytosis. The pain usually radiates into the back but may radiate to the right or left. Nausea and vomiting are usually present. Weakness, sweating, and anxiety are noted in severe attacks. There may be a history of alcohol intake or a heavy meal immediately preceding the attack, or a history of milder similar episodes or biliary colic in the past.

Chronic pancreatitis occurs most often in patients with alcoholism, severe malnutrition, or untreated hyperparathyroidism. It may be hereditary or idiopathic. Recently, a gene for hereditary pancreatitis, transmitted as an autosomal dominant trait with variable penetrance, has been identified on chromosome 7. Progressive fibrosis and destruction of functioning glandular tissue occur. Persistent or recurrent episodes of epigastric and left upper quadrant pain with referral to the upper left lumbar region are typical. Anorexia, nausea, vomiting, constipation, flatulence, and weight loss are common.

Correctable coexistent biliary tract disease should be treated surgically. A low-fat diet should be prescribed. Alcohol is forbidden because it frequently precipitates attacks.

The applying of the informational radiowave therapy is very effective in the treatment of pancreatitis and allows achieving the remission after 8-10 therapeutic sessions, prevents serious complications such as (diabetes mellitus, thrombosis of splenic vein, cicatricial stenosis of pancreatic duct).

Recommended zones for electromagnetic exposure: 3-6(GB-20), 4-3(TE-20), 6-8(LR-13) left side, 16-9(GB-43) right side, 6-6(CV-12), 7-8(CV-3), 7-6(CV-4), 12-9(HT-7), 12-10(PC-7), 16-1(ST-36).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment is 10 days. It is recommended to repeat the 7 days treatment course in chronic pancreatitis in 3 weeks during 3 months.

8.20. Enterocolitis. Colitis

There are acute and chronic inflammatory diseases of small and large intestines. Acute enterocolitis involves stomach and large intestine. Etiologic factors of acute enterocolitis include:

Infectious (cholera, typhoid fever, salmonellosis, and other viruses);

Alimentary due to a quality of food and irritation of mucous membrane of small and large intestines;

Toxic due mushroom poisoning, drupe poisoning, arsenic poisoning, etc;

Allergic due to idiosyncrasy to some kind of food and drugs;

The onset is usually abrupt with nausea, vomiting, diarrhea, borborygmus, spasmodic pain; then fatigue, malaise and fever (38-39°C), and symptoms of general intoxication occur. There is tenderness in epigastric area.

Noninfectious enteritis must be distinguished from acute intestinal infections to determine a treatment plan. The pathogenesis of the disorder is due to pathogenic agents that contact and affect the mucous membranes of the intestines or infection (microbes and their toxins) brings into intestinal vessels through blood. Both of these pathogenetic actions damage the mucous membrane of the intestines. The predisposing factors include cold drinks, supercooling, hypovitaminosis, i.e. factors that destroy the informational field of the structures of the mucous membranes cells of large and small intestines.

Chronic enterocolitis may occur after repeated acute enterocolitis, as the complication of dysentery, diseases of stomach, pancreas, thyroid gland, vegetative nervous system accompanied by the motor and secretory disturbances of gastrointestinal tract.

Acute infectious enterocolitis requires combined treatment of informational radiowave therapy with pharmacologic agents. Acute and chronic noninfectious enterocolitis are recommended to manage with informational radiowave therapy like monotherapy.

Informational radiowave therapy has analgetic, disintoxicational, desensitizational effects on the intestines and integral organism. Informational radiowave therapy eliminates spasms of the intestines, normalizes the peristalsis, accelerates the healing process in the mucous membranes.

Recommended zones for electromagnetic exposure: 7-2(ST-25), **9-1**(BL-21), **9-6**(BL-25), **3-1**(GV-20),
7-3(CV-8), **8-8**(BL-17), **16-1**(ST-36), **7-5**(KI-14),
10-6(LI-10), **15-6**(SP-4).

Extra points

In dehydration and acidosis - 12-2(PC-3), **14-1**(BL-40).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment is 7-10 days. It is recommended to hold therapeutic sessions 2-3 times a day in acute stage, continue with one therapeutic session a day or in a day if the symptoms (spasmodic pain, diarrhea and etc) relieve.

8.21. Irritable bowel syndrome

The functional gastrointestinal disorders are characterized by a variable combination of chronic or recurrent gastrointestinal symptoms not explained by structural or biochemical abnormalities.

Irritable bowel syndrome can be defined, therefore, as an idiopathic clinical entity characterized by some combination of chronic symptoms, including the following: (1) abdominal pain, (2) altered or fluctuating bowel frequency and stool consistency, (3) abdominal distention or bloating, and (4) varying degrees of anxiety or depression. Patients may also have other functional complaints such as dyspepsia, heartburn, chest pain, fatigue, urologic dysfunction, and gynecologic problems.

Symptoms usually begin in late teens to early 20s.

Recommended zones for electromagnetic exposure: 7-3(CV-8), **7-6**(CV-4), **16-5**(LR-2), **7-2**(ST-25)
left side, 15-7(SP-1).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 5-10 days or one therapeutic session is sufficient.

8.22. Diarrhea

Diarrhea is a common symptom that can range in severity from an acute, self-limited annoyance to a severe, life-threatening illness. Patients may use the term “diarrhea” to refer to increased frequency of bowel movements, increased stool liquidity, a sense of fecal urgency, or fecal incontinence. To properly evaluate the complaint, the physician must determine the patient’s normal bowel pattern and the nature of the current symptoms.

In the normal state, approximately 10L of fluid enter the duodenum daily, of which all but 1.5L are absorbed by the small intestine. The colon absorbs most of the remaining fluid, with only 100mL lost in the stool. From a medical standpoint, diarrhea is defined as a stool weight of more than 250 g/24h. In reality, quantification of stool weight is necessary only in some patients with chronic diarrhea. In most cases, the physician’s working definition of diarrhea is an increased stool frequency (more than two or three bowel movements per day) or liquidity of feces.

The causes of diarrhea are myriad. There are acute and chronic diarrheas. The acute diarrhea is often infectious (bacterial, protozoal, viral). The causes of chronic diarrhea may be grouped into six major pathophysiologic categories (osmotic diarrhea, secretory diarrhea, inflammatory conditions, malabsorption syndromes, motility disorders, chronic infections).

The treatment should be directed to the treatment the underlying cause of diarrhea. The informational radiowave therapy is applied to relieve symptoms.

Recommended zones for electromagnetic exposure: **6-6**(CV-12), **7-2**(ST-25), **9-6**(BL-25), **11-4**(LI-4),
15-1(SP-6), **16-1**(ST-36);

Extra points

For nausea and vomiting- **12-4**(PC-6);

For persistent diarrhea - **7-3**(CV-8), **7-6**(CV-4).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 3 minutes each recommended zone. Change the zones during the treatment course. The duration of the treatment is 2-3 days.

8.23. Constipation

Constipation is an extremely common complaint. The term is used variably by patients to refer to stools that are too hard, small, or infrequent or to excessive straining during defecation. Therefore, the first step in evaluating the patient is to determine what is meant by “constipation”. In the general population, the “normal” frequency of bowel movements is broad, ranging from 3 to 12 per week. From a medical perspective, constipation is present when a patient has two or fewer bowel movement per week or excessive difficulty and straining at defecation.

Chronic constipation may complicate with secondary colitis, proctosigmoiditis, hemorrhoids, anal fissure, paraproctitis with fistulas, fecal impaction. Enemas may be used on the first 2-3 days.

All patient with chronic constipation should undergo careful investigations to exclude oncologic disease.

Recommended zones for electromagnetic exposure: **9-6**(BL-25), **16-1**(ST-36), **9-7**(BL-31).

Extra points

For complications (hemorrhoids, anal fissure): **18-1**(GV-1), **14-3**(BL-57);

For psychologic disorders associated with constipation and vegetative symptom: **3-1**(GV-20),
3-6(GB-20),
12-9(HT-7).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 7-10 days. It is recommended to do prophylactic courses twice a year.

8.24. Hemorrhoids

Internal hemorrhoids are a plexus of superior hemorrhoidal veins located above the dentate line which are covered by mucosa. They are a normal anatomic entity, occurring in all adults. Internal hemorrhoids form a vascular cushion in the lower rectum that may contribute to normal continence. They occur in three primary locations – right anterior, right posterior and left lateral – though smaller hemorrhoids may occur between these primary locations.

External hemorrhoids arise from the inferior hemorrhoidal veins located below the dentate line and are covered with squamous epithelium of the anal canal or perianal region. Hemorrhoids may become symptomatic as a result of activities that increase venous pressure, resulting in distention and engorgement. Straining at stool, constipation, prolonged sitting, pregnancy, obesity, and low-fiber diets all may contribute.

Most patients with early (stage I and stage II) disease can be managed with conservative treatment. To decrease straining with defecation, patients should be given instructions for a high-fiber diet and told to increase fluid intake with meals.

Recommended zones for electromagnetic exposure: **12-12**(PC-8), **13-3**(BL-60), **14-1**(BL-40), **7-3**(CV-8),
18-1(GV-1).

Extra points

for bleeding of hemorrhoids: **15-2**(KI-7), **15-1**(SP-6), **18-3**(LR-8).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area, and locally around anal orifice for 10 minutes. The treatment course is 8-10 days. It is recommended to repeat therapy every month during for 2-3 months.

Chapter 9. Skin diseases

9.1. Urticaria & angioedema

Urticaria can result from many different stimuli on an immunologic or nonimmunologic basis. The most common immunologic mechanism is hypersensitivity mediated by IgE, seen for most patients with acute urticaria; another involves activation of the complement cascade. Finally, some patients with chronic urticaria demonstrate autoantibodies directed against mast cell IgE receptors, with histamine-releasing activity. Lesions are itchy red swellings of a few millimeters to many centimeters. The morphology of the lesions may vary over a period of minutes to hours, resulting in geographic or bizarre patterns. With involvement of deeper vessels, there may be swelling of the lips, tongue, eyelids, larynx, palms, soles, and genitalia in association with more typical lesions.

Recommended zones for electromagnetic exposure: 8-1(GV-14), **9-10**(GB-30), **10-5**(LI-11), **15-8**(KI-1), **16-1**(ST-36), **16-4**(LR-3), **17-2**(ST-32), **18-3**(LR-8), **18-5**(SP-10).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each zone. Change the zones for exposure during the treatment course. Duration of treatment course is 7-10 days.

9.2. Pompholyx (Dyshidrosis, Dyshidrotic Eczema)

“Dyshidrotic eczema” is a misnomer, suggesting that the vesicles of this condition are related to eccrine sweat ducts and sweating, which they are not.

- “Tapioca” vesicles of 1-2 mm on the palms, soles, and sides of fingers, associated with pruritus.
- Vesicles may coalesce to form multiloculated blisters.
- Scaling and fissuring may follow drying of the blisters.
- Appearance in the third decade, with lifelong recurrences.

Small clear vesicles stud the skin at the sides of the fingers and on the palms or soles. They look like the grains in tapioca. They may be associated with intense itching. Later, the vesicles dry and the area scaly and fissured.

Recommended zones for electromagnetic exposure: 12-2(PC-3), **10-5**(LI-11), **12-11**(LU-11), **16-5**(LR-2), **15-2**(KI-7), **5-5**(CV-17).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area and also locally affected area for 10-15 minutes. The treatment course is 7-10 days.

9.3. Cutaneous edema

Skin edema is associated with excessive accumulation of fluid in skin.

There are several types of skin edema:

- Allergic edema of the skin – occur as component of the skin reaction;
- Bullous edema of the skin, the accumulation of fluid under epidermis with bullae development. The same bullae appear in burns, frostbite II degree and erysipelas;
- Inflammatory edema is associated with inflammation due to increased permeability of the vessels;
- Congestion edema appears because of difficult lymph and venous outflow from the peripheral areas. It results from lymph stagnation because pressure on lymph vessels, spasm of its (e.g., hysteria) or fast increasing of lymph formation and capillary obstruction.

- Indurative edema is characterized by induration, shining and pallor of skin. It occurs in early stage of systemic disease (scleroderma) and other serious systemic disease with skin involvement.
- Traumatic edema occurs with traumatic injury of tissues. It results from lymph and blood stagnation, increased permeability of the vessels and disturbance of outflow.
- Quincke's edema has several synonyms: Quincke's disease, Milton's urticaria, angioneurotic edema, is characterized as localized and acute edema.

All kinds of edema characterized definite clinical signs. They localize usually on face, lips, eyelids, and genitalia, mucous membranes. This syndrome considers as special type of urticaria.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **9-10**(GB-30), **10-5**(LI-11), **12-11**(LU-11), **5-8**(KI-1), **16-1**(ST-36), **16-4**(LR-3), **16-5**(LR-2), **17-2**(ST-32), **18-3**(LR-8), **18-5**(SP-10).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each zone and also locally on the affected area for 10 minutes. Change the zones during the treatment period of 10 days. On the first and second days apply twice three times daily.

9.4. Pruritus (Itching)

Pruritus is disagreeable sensation that provokes a desire to scratch. It is a primary sensory impulse carried on unmyelinated C fibers in the spinothalamic tract. It is modulated by central factors, including cortical ones. Not all cases of Pruritus are mediated by histamine, though several mediators – bradykinin, neurotensin, secretin, and substance P – release histamine.

Although many cases of generalized Pruritus can be attributed to dry skin – whether naturally occurring and precipitated or aggravated by climatic conditions or arising from disease states – there are many other causes: scabies, dermatitis herpetiformis, atopic dermatitis, Pruritus vulvae et ani, miliaria, insect bites, pediculosis, contact dermatitis, drug reactions, urticaria, urticarial eruptions of pregnancy, psoriasis, lichen planus, lichen simplex chronicus, exfoliative dermatitis, folliculitis, sunburn, bullous pemphigoid, and fiberglass dermatitis.

Persistent pruritus not explained by cutaneous disease should prompt a staged workup for systemic causes. Perhaps the commonest cause of pruritus associated with systemic disease is uremia in conjunction with hemodialysis. Topical capsaicin may of benefit. Both this condition and the pruritus of obstructive biliary disease may be helped by phototherapy with ultraviolet B or PUVA. Endocrine disorders such as hypo- or hyperthyroidism, psychiatric disturbances, lymphoma, leukemia, and other internal malignant disorders, iron deficiency anemia, and certain neurologic disorders may also cause pruritus.

Persistent pruritus not explained by cutaneous disease should prompt a staged workup for systemic cause. Treatment is complex. Informational radiowave therapy improves the psychological condition of patients and relieves the itching.

Recommended zones for electromagnetic exposure:

For the first day - **3-1**(GV-20), **6-4**(LR-14), **8-1**(GV-14), **9-10**(GB-30), **10-5**(LI-11), **11-5**(SI-2).

For second day - **12-5**(LU-7), **12-11**(LU-11), **13-2**(GB-39), **16-4**(LR-3), **18-1**(GV-10), **18-3**(LR-8).

Use all the recommended zones every day. Expose for 5 minutes for each zone. Change the zones during the treatment course. Duration of treatment course is 8-10 days. In acute stage apply twice daily. Repeat the treatment course in 2-3 weeks.

9.5. Anogenital pruritus

Most cases have no obvious cause, but multiple specific causes have been identified. Anogenital pruritus may have the same causes as intertrigo, lichen simplex chronicus, or seborrheic or contact dermatitis (from soaps, colognes, douches, contraceptives and perhaps scented toilet tissue), or it may be due to irritating secretions, as in diarrhea, leukorrhea, or trichomoniasis, or to local disease (candidiasis, dermatophytosis, erythrasma). Psoriasis or seborrheic may be present. Uncleanliness may be at fault. In pruritus ani, hemorrhoids are often found, and leakage of mucus and bacteria from distal rectum onto the perianal skin may be important in cases in which no other skin abnormality is found. Many women experience pruritus vulvae. In women, pruritus ani by itself is rare, and pruritus vulvae does not usually involve the anal area, though anal itching will usually spread to the vulvae. In men, pruritus of the scrotum is most commonly seen in the absence of pruritus ani. When all possible known causes have been ruled out, the condition is diagnosed as idiopathic or essential pruritus – by no means rare.

The only symptom is itching, which chiefly nocturnal. Physical findings are usually not present, but there may erythema, fissuring, maceration, lichenification, excoriation, or changes suggestive of candidiasis or tinea.

It is advised to start from the treatment of constipation, preferably with high-fiber management (psyllium) may help.

Recommended zones for electromagnetic exposure: 6-4(LR-14), 9-10(GB-30), 18-2(GV-30), 18-2(GV-1), 18-1(CV-1), 12-5(LU-7), 16-4(LR-3).

Use all the recommended zones for one therapeutic session every day. Expose for 5 min for each area. Treatment course is 8-10 days. In acute stage hold therapeutic sessions twice daily.

9.6. Acne vulgaris

Acne vulgaris is discussed under pustular disease, but it is polymorphic. Open and closed comedones, papules, pustules, and cysts are found. Acne vulgaris is one of the most common disease of humans. It is unknown cause and is apparently activated by androgens in those who are genetically predisposed. The disease is more common and more severe in males. Contrary to popular belief, it does not always clear spontaneously when maturity is reached. If untreated, it may persist into the fourth, fifth, or even sixth decade of life. The skin lesions follow sebaceous activity, plugging of the infundibulum of the follicles, retention of sebum, overgrowth of the acne bacillus. (*Propionibacterium acnes*) in uncarcerated sebum with resultant release of and irritation by accumulated fatty acids, and foreign body reaction to extrafollicular sebum.

There may be mild soreness, pain, or itching. The lesions occur mainly over the face, neck, upper chest, back, and shoulders. Comedones are common, and these are the hallmark of acne vulgaris. Acne may have different presentations at different ages.

Informational radiowave therapy is very effective for acne vulgaris and acne seborrheic.

Recommended zones for electromagnetic exposure: 5-2(KI-27), 10-5(LI-11), 11-4(LI-4), 15-1(SP-6), 13-2(GB-39), 16-4(LR-3), 12-5(LU-7), 12-9(HT-7).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each zone, and also locally affected area during 10 minutes. The treatment course is 10 days. Repeat 6 days' treatment course in 2 weeks during 3 months.

9.7. Folliculitis (Including Sycosis)

Folliculitis has multiple causes. It may be caused by staphylococcal infection and may be more common in the diabetic. When the lesion is deep-seated, chronic, and recalcitrant on the head and neck, it is called sycosis. Sycosis is usually propagated by the autoinoculation and trauma of shaving. The upper lip is particularly susceptible to involvement in men with chronic nasal discharge from sinusitis or hay fever.

Nonbacterial folliculitis may also be caused by oils that are irritating to the follicle, and these may be encountered in the workplace (machinists) or at home (various cosmetics and cocoa butter or coconut oils).

Folliculitis may also be caused by occlusion, perspiration, and rubbing, such as that resulting from tight jeans and other heavy fabrics on the upper legs.

Folliculitis on the back that looks like acne but does not respond to acne therapy may be caused by the yeast *Malassezia furfur*. This infection may require biopsy for diagnosis and is recommended to treat with oral ketoconazole, 200 mg daily; or topical 2.5% selenium sulfide, 15 minutes daily for 3 weeks.

Folliculitis – so called “steroid acne” – may be seen in the first weeks of systemic steroid or on tapering of the dose.

A form of sterile folliculitis consisting of urticarial papules with prominent eosinophilic infiltration has been reported in patients with AIDS.

The symptoms range from slight burning and tenderness to intense itching. The lesions consist of pustules of hair follicles. In sycosis, the surrounding skin becomes involved also and so resembles eczema, with redness and crusting.

A. Local Measures: Cleanse the area gently with chlorhexidine and apply saline or aluminum subacetate soaks or compresses to the involved area for 15 minutes twice daily if very exudative.

B. Systemic antibiotics may be tried only if the skin infection is complicated.

Recommended zones for electromagnetic exposure: 5-5(CV-17), 16-5(LR-2), 16-1(ST-36), 8-1(GV-14), 15-4(KI-6), 10-5(LI-11), 7-6(CV-4).

Use all recommended zones for one therapeutic session every day. Expose for 5 minutes each zone and also locally most painful site with multiple lesions for 10-15 minutes. The treatment course is 10-12 days. Repeat the treatment course in 2-3 weeks.

9.8. Atopic dermatitis (Eczema)

- Pruritic, exudative, or lichenified eruption on face, neck, upper trunk, wrists, and hands and in the antecubital and popliteal folds.
- Personal or family history of allergic manifestations (eg, asthma, allergic rhinitis, atopic dermatitis).
- Tendency to recur, with remission from adolescence to age 20.

Diagnostic criteria for atopic dermatitis must include pruritus, typical morphology and distribution (flexural lichenification in adults; facial and extensor involvement in infants), and a tendency toward chronic or chronically relapsing dermatitis.

Treatment

A. General Measures

These patients have hyperirritable skin, so one must first explain to the patient or parents that anything that dries or irritates the skin will be a problem. To determine the potential effect of foods, the parent may eliminate one food at a time that is thought to induce flares. Dairy products and wheat are the most common offenders. Foods, that are a problem typically cause itching within minutes to a few hours after eating.

B. Local Treatment

Corticosteroids in lotion, cream, or ointment form can be almost completely supplanted other topical medications but should not be the only therapy in severe disease. They should be applied sparingly twice to four times daily rubbed in well. Their potency should be appropriate to the severity of the dermatitis. Treatment is dictated by the stage of the dermatitis.

The disease runs a chronic course often with a tendency to disappear only to recur. Many children outgrow generalized involvement at puberty but develop hand dermatitis as adults. Poor prognostic factors for persistence into adulthood in atopic dermatitis include onset early in childhood, early-generalized disease, and asthma. Only 40-60% of these patients have lasting remissions.

Taking into account the etiology, pathogenesis, symptoms of pruritic dermatitis the using of informational radiowave therapy (IRT) is absolutely indicated. Since it is very difficult to diagnose in the hospital without special equipment we recommend to go through diagnostic in Research Center of Informational Medicine using the method of informational radiowave diagnostic. It is advisable to be under control of the doctors of informational medicine.

Recommended zones for electromagnetic exposure: 10-5(LI-11), **11-4**(LI-4), **15-1**(SP-6), **16-1**(ST-36),
16-5(LR-2), **18-3**(LR-8), **14-1**(BL-40).

Patient may use also on the medial side of arms and on the anterolateral side of the trunk: 15-2(KI-7),
18-4(SP-9).

On the lateral side of the arms and posterior flank side of the trunk: 12-5(LU-7), **9-4**(BL-52).

On the face: 1-8(LI-20), **3-1**(GV-20).

On the hands: 12-8(HT-6).

Use 5-6 of the recommended zones for one therapeutic session daily. Expose for 5 min each area, and also locally affected area for 10 min. Repeat the treatment course in 4 weeks.

9.9. Photodermatitis

Photodermatitis is an acute or chronic inflammatory skin reaction due to hypersensitivity to sunlight or other sources of actinic rays, photosensitization of the skin by certain drugs, or idiosyncrasy to actinic light as seen in some constitutional disorders including the porphyrias and many hereditary disorders (phenylketonuria, xeroderma pigmentosum, and others). Contact photosensitivity may occur with perfumes, antiseptics, and other chemicals. Photodermatitis is manifested most commonly as photosensitivity – a tendency for the individual to sunburn more easily than usual – or, more rarely, as photoallergy, a true immunologic reaction that often presents with papular or vesicular lesions. The acute inflammatory skin reaction, if severe enough, is accompanied by pain, fever, gastrointestinal symptoms, malaise, and even prostration, but this is very rare. Signs include erythema, edema, and prostration, but this is very rare. Signs include erythema, edema, and possibly vesiculation and oozing on exposed surfaces. Peeling of the epidermis and pigmentary changes often result. The key to diagnosis is localization of the rash to photoexposed areas, though these eruptions may become generalized with time to involve even photoprotected areas.

Recommended zones for electromagnetic exposure: 10-5(LI-11), **15-8**(KI-1), **2-6**(ST-10), **11-2**(TE-5),
12-2(PC-3), **3-1**(GV-20), **4-3**(TE-20).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area and also locally affected areas for 10 minutes. The treatment course is 7-10 days for acute stage. In chronic stage of photodermatitis treatment course of 6 days is recommended with break in 2 weeks during two months.

9.10. Dermatitis medicamentosa

As is well recognized, only a minority of cutaneous drug reactions results from allergy. True allergic involve prior exposure, an “incubation” period, reactions to doses far below the therapeutic range, manifestations different from the usual pharmacologic effects of the drug, involvement of only a

small portion of the population at risk, restriction to a limited number of syndromes (anaphylactic and anaphylactoid, urticarial, vasculitic, etc), and reproducibility. Rashes are among the most common adverse reactions to drugs and occur in 2-3% of hospitalized patients.

The onset is usually abrupt, with bright erythema and often severe itching, but may be delayed. Fever and other constitutional symptoms may be present. The skin reaction usually occurs in symmetric distribution.

Recommended zones for electromagnetic exposure: 3-6(GB-20), **16-5**(LR-2), **15-1**(SP-6), **10-5**(LI-11), **5-5**(CV-17), **14-1**(BL-40).

Use every day for one therapeutic session all the recommended zones. Expose for 5 minutes each zone and also locally affected area for 10 minutes. Treatment course is 10-15 days.

9.11. Lichen simplex chronicus. (Circumscribed Neurodermatitis)

- Chronic itching associated with hyperpigmented lichenified skin lesions.
- Lichenified lesions with exaggerated skin lines overlying a thickened, well-circumscribed scaly plaque.
- Predilection for nape of neck, wrists, external surfaces of forearms, inner thighs, lower legs, popliteal and antecubital areas.

A traditional explanation for lichen simplex chronicus (circumscribed neurodermitis) is that it represents a self-perpetuating scratch-itch cycle. Hypertrophic nerve fibers have been found in lichenified, thickened lesions of long standing, but it is not known if these are of pathogenetic significance. Patients with very chronic recalcitrant lesions may be depressed or have other psychologic symptoms.

Treatment is complex. Informational radiowave therapy influences on all affected organs and system. It results in mood change (good mood), itching relieves, skin rashes disappear.

Recommended zones for electromagnetic exposure:

On the first day - 3-1(GV-6), **3-6**(GV-20), **7-3**(CV-8), **7-6** (CV-4), **8-1**(GV-14), **14-1**(BL-40).

On the second day - 10-5(LI-11), **12-5**(LU-7), **12-10**(PC-7), **12-11**(LU-11), **16-5**(LR-2), **15-1**(SP-6)

Use all the recommended zones every day for one therapeutic session. Expose for 5 min each area, and also locally on skin rashes for 10 minutes. Expose one day local points, and next day the recommended zones. The initial course is 10 days. It is recommended to repeat the course for 6 days in two weeks during 3 months.

9.12. Psoriasis

Psoriasis is a common benign, acute or chronic inflammatory skin disease that appears to be based upon a genetic predisposition. Injury or irritation of normal skin tends to induce lesions of psoriasis in the site in some patients (Koebner's phenomenon). Psoriasis has several variants – the most is the plaque type.

There are often no symptoms. Eruptive psoriasis may itch, and psoriasis in body folds and on the vulval may itch severely ("inverse psoriasis"). Although psoriasis may occur anywhere, one should examine the scalp, elbows, knees, palms and soles, and nails. The lesions are red, sharply defined plaques covered with silvery scales. The elbows, knees, and scalp are the most common sites. The glans penis and vulval may be affected. Occasionally, only the flexures (axillae, inguinal areas) are involved. Fine stippling ("pitting") in the nails is highly suggestive of psoriasis. Psoriatics are said to often have a pink or red intergluteal fold.

There are many therapeutic options in psoriasis, to be chosen according to the extent and severity of disease and with a clear understanding of the risks and benefits of therapy.

If psoriasis involves more than 30% of the body surface, it is difficult to treat with topical agents. The treatment of choice is outpatient UVB light exposure three times weekly. Clearing occurs in an average of 7 weeks.

The informational radiowave therapy needs to combine with local pharmacological agents.

Recommended zones for electromagnetic exposure:

For first day - 7-4(CV-6), 10-5(LI-11), 12-5(LU-7), 12-7(HT-5), 12-11(LU-11), 15-1(SP-6).

For second day - 5-1(CV-22), 15-4(KI-6), 16-1(ST-36), 16-3(ST-41), 16-4(LR-3), 18-3(LR-8).

Use all the recommended zones for one therapeutic session daily. Expose for 5 min each zone. Change the zone every day: apply one day recommended zones for the first day and on the next day for second during the treatment course. The duration of treatment course is 10 days every month during 6 months.

9.13. Herpes simplex

Over 85% of adults have serologic evidence of herpes simplex type 1 (HSV-1) infections, most often acquired asymptotically in childhood. The infection is initially acquired by sexual contact, and there are usually no symptoms at first.

- Recurrent small grouped vesicles on an erythematous base, especially in the orolabial and genital areas.
- May follow minor infections, trauma, stress, or sun exposure; regional lymph nodes may be swollen and tender.
- Tzanck smear is positive for multinucleated epithelial giant cells; viral cultures and direct fluorescent antibody tests are positive.

The principal symptoms are burning and stinging. Neuralgia may precede or accompany attacks. The lesions consists of small, grouped vesicles that can occur anywhere but which most often occur on the vermilion border of the lips, the penile shaft or glans penis, the labia, the perianal skin, and the buttocks. The lesions usually crust and heal in 1 week. Herpes simplex is the most common cause of painful perianal ulcerations in patients with AIDS.

Treatment

Informational radiowave treatment of herpes simplex considers urgent using of it. The better result if patient starts to use it on the first several hours (when vesicular rashes appears) it is often stops the further development of illness on the first day and recovery occurs.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 10-5(LI-11), 11-4(LI-4), 12-10(PC-7), 15-2(KI-7), 16-1(ST-36), 16-5(LR-2).

Use 5-6 zones for therapeutic session daily. Expose for 5 min each zone and locally affected areas (skin, mucus membrane). Change the zones during the treatment course. The treatment course usually lasts 5-7 days.

9.14. Herpes zoster (Shingles)

Herpes zoster is an acute vesicular eruption due to the varicella-zoster virus. It usually occurs in adults. With rare exceptions, patients suffer only one attack of zoster. In immunocompromised patients, generalized, life-threatening dissemination may occur. In patients with HIV infection, zoster often occurs while the patient is otherwise asymptomatic.

- Pain along the course of a nerve followed by painful grouped vesicular lesions.

- Involvement is unilateral; some lesions may occur outside the affected dermatome.
- Lesions are usually on face or trunk.
- Tzanck smear positive, especially in early lesions.

It often occurs that some vesicular lesions appear on different areas of the body. It is possible of involvement of central and peripheral nervous system. In that case the symptoms occur. The symptoms can be serious with severe painful syndrome.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **16-5**(LR-2), **3-6**(GB-20), **8-1**(GV-14), **5-5**(CV-17).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each zone and also locally on the affected area along the nerve for 10-15 minutes. The duration of the treatment is 10-12 days. Repeat the treatment course in 2 weeks for 6-7 days.

9.15. Pityriasis rosea

This is a common mild, acute inflammatory disease that is 50% more common in females. Young adults are principally affected, mostly in the spring or fall. Concurrent household cases have been reported. The cause is unknown, but it is speculated that a virus may be causative. The diagnosis is made by finding one or more classic lesions. The lesions consist of oval, fawn-colored macules up to 1 cm in diameter. The centers of the lesions have a crinkled “cigarette paper” appearance and a collarette scale, ie, a thin bit of scale that is bound at the periphery and free in the center. Only a few lesions in the eruption may have this characteristic appearance. Lesions follow cleavage lines on the trunk (so-called Christmas tree pattern), and the proximal portions of the extremities are often involved.

Start to treat earlier from the onset of disease to get the best result. The itching usually stops after several séance of treatment of the informational radiowave therapy.

Recommended zones for electromagnetic exposure: 8-1(GV-14), **8-3**(GB-21), **10-5**(LI-11), **5-5**(CV-17), **3-6**(GB-20), **15-1**(SP-6).

Use 5-6 zones for therapeutic session daily. Expose for 5 minutes each zone and also locally affected area for 10 minutes. The treatment course is 8-10 days.

9.16. Pemphigus

Pemphigus is an uncommon intraepidermal blistering disease occurring on skin and mucous membranes and caused by autoantibodies to adhesion molecules in the cadherin family (in pemphigus vulgaris) and to a complex containing desmosomal proteins, including desmoglein I (in pemphigus foliaceus), expressed in skin and mucous membranes. These autoantibodies cause acantholysis, the separation of epidermal cells from each other. The cause is unknown, and in the preantibiotic, presteroid era the condition, if untreated, was usually fatal within 5 years. The bullae appear spontaneously and are relatively asymptomatic, but the lesions become extensive and the complications of the disease lead to great toxicity and debility. The disease occurs almost exclusively in middle-aged or older adults. Drug-induced autoimmune pemphigus from drugs including penicillamine and captopril has been reported. The pathogenetic role of IgC antibodies has been proved by passive transfer of antibodies to neonatal mice, reproducing the disease, and acantholysis can develop in a culture of normal human skin tissue when pemphigus serum is added. There is an association with HLA-A10 antigen.

There are several forms of pemphigus:

- Pemphigus vulgaris and its variant, pemphigus vegetans. The vulgaris form begins in the mouth in over 50% of cases. Lesions often appear first on the oral mucous membranes, and these rapidly become erosive.

- Pemphigus foliaceus and its variant, pemphigus erythematosus, the more superficially blistering. The foliaceus form is especially apt to be associated with other autoimmune disease, or it may be drug-induced, eg, by exposure to penicillamine.

Informational radiowave therapy can decrease the dose of the steroids and side effects of its. Sometimes it can abolish the necessity of using the steroids because the informational radiowave therapy can influence on etiologic and pathogenic factors.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **4-3**(TE-20), **10-5**(LI-11), **11-7**(TE-1), **12-10**(PC-7), **14-1**(BL-40), **15-2**(KI-7), **16-5**(LR-2), **18-3**(LR-8).

It is recommended to hold therapeutic session twice daily. Use 5-6 of recommended zones for therapeutic session. Expose for 5 minutes each zone and also locally affected area for 10 minutes. Change the zones during the treatment period. The treatment course is 10 days.

9.17. Impetigo

Impetigo is a contagious and autoinoculable infection of the skin caused by staphylococci or streptococci (or both). Classically, two forms have been recognized: (1) a vesicopustular type, with thick golden-crust lesions caused by group A β -hemolytic *Streptococcus* or coagulase-positive *Staphylococcus aureus*; and (2) a bullous type, generally associated with phage group II *S aureus*.

However, most cases of impetigo of either presentation now appear to be due to staphylococci.

Itching is the only symptoms. The lesions consist of macules, vesicles, bullae, pustules, and honey-colored gummy crusts that when removed leave denuded red areas. The face and other exposed parts are most often involved. Ecthyma is a deeper form of impetigo caused by staphylococci or streptococci, with ulceration and scarring. It occurs frequently on the legs and other covered areas, often as a complication of debility and local cutaneous trauma.

Treatment is various depending upon the severity of the disease. In any case, it is proven to combine informational radiowave therapy with antibacterial agents.

Recommended zones for electromagnetic exposure: 7-6(CV-4), **10-5**(LI-11), **11-4**(LI-4), **12-10**(PC-7), **12-11**(LU-11), **14-1**(BL-40), **15-2**(KI-7), **16-5**(LR2), **18-3**(LR-8).

Use any 5-6 zones for one therapeutic session daily. Expose for 5 minutes each zone and locally affected area for 10 minutes. Change the zones of expose during the treatment course. The duration of treatment is 10-12 days. On first 2-3 days use the informational radiowave therapeutic sessions two-three times daily.

9.18. Erysipelas

Erysipelas is acute infectious disease. It is a superficial form of cellulites that occurs classically on the cheek, caused by β -hemolytic streptococci.

The symptoms are pain, malaise, chills, and moderate fever. A bright red spot appears first, very often near a fissure at the angle of the nose. This spreads to form a tense, sharply demarcated, glistening, smooth, hot area. The margin characteristically makes noticeable advances from day to day. The patch is somewhat edematous and can be pitted slightly with the finger. Vesicles or bullae occasionally

develop on the surface. The patch does not usually become pustular or gangrenous and heals without scar formation. The disease may complicate any break in the skin that provides a portal of entry for the organism.

Patients need hospitalization in acute stage. At the hospital informational radiowave therapy should combine with antibacterial treatment.

Recommended zones for electromagnetic exposure: 10-5(LI-11), **11-4**(LI-4), **14-1**(BL-40), **15-1**(SP-6),
16-1(ST-36), **16-5**(LR-2), **18-3**(LR-8)

Use all the recommended zone for one therapeutic session daily. Expose for 5 minutes each zone and also locally for 10 minutes involving healthy skin. The treatment course is 8-10 days. In acute stage use the MINITAG[®] twice daily reducing to once daily later.

9.19. Furunculosis (Boils) & carbuncles

A furuncle (boil) is a deep-seated infection (abscess) involving the entire hair follicle and adjacent subcutaneous tissue. The most common sites of occurrence are the hairy parts exposed to irritation and friction, pressure, or moisture or to the plugging action of petroleum products. Because the lesions are autoinoculable, they are often multiple. Thorough investigation usually fails to uncover a predisposing cause; however, diabetes mellitus (especially if using insulin injections), injection drug use, allergy injections, and HIV disease all increase the risk of staphylococcal infections by increasing the rate of nasal carriage.

A carbuncle consists of several furuncles developing in adjoining hair follicles and coalescing to form a conglomerate, deeply situated mass with multiple drainage points.

Pain and tenderness may be prominent. The follicular abscess is either rounded or conical. It gradually enlarges, becomes fluctuant, and then softens and opens spontaneously after a few days to 1-2 weeks to discharge a core of necrotic tissue and pus. The inflammation occasionally subsides before necrosis occurs. Infection of the soft tissue around the nails (paronychia) may be due to staphylococci when it is acute. This is a variant of furuncle. Other organisms may be involved, including *Candida* and herpes simplex (herpetic whitlow).

Treatment

Incision and drainage is recommended for all loculated suppurations and is the mainstay of therapy. Systemic antibiotics are indicated (chosen on the basis of cultures and sensitivity tests if possible).

Immobilize the part and avoid overmanipulation of inflamed areas.

The using of MINITAG[®] in early stage before the development of pus pivot completely stops the inflammation process without additional using antibacterial or local treatment.

Recommended zones for electromagnetic exposure: 10-5(LI-11), **11-4**(LI-4), **12-10**(PC-7), **18-3**(LR-8),
7-6(CV-4), **16-5**(LR-2).

Use every day all the recommended zones for one therapeutic session. Expose for 5 minutes each area, and also affected areas for 10 minutes. On the first two days apply three times daily and continue with one session daily. The duration of treatment is 5-7 days.

9.20. Leg ulcers secondary to venous insufficiency

Patients at risk may have a history of venous insufficiency, either with obvious varicosities or with a past history of thrombophlebitis, or with immobility of the calf muscle group (paraplegics, etc). Red, pruritic patches of stasis dermatitis often precede ulceration. Because venous insufficiency is the most common cause of lower leg ulceration, testing of venous competence is still a required part of the evaluation even when no changes of venous insufficiency are present.

Classically, chronic edema is followed by dermatitis, which is often pruritic. These changes followed by hyperpigmentation, skin breakdown, and eventually sclerosis of the skin of the lower leg. The ulcer base may be clean, but it often has a yellow fibrin eschar that would appear easy to debride by using compresses but often requires surgical treatment.

Before the procedure clean the affected area with antiseptic solution. Move slowly the radiator of apparatus MINITAG® above the ulcerative area involving healthy areas for 10-15 minutes. Hold the radiator 2-5 mm above from the ulcer. The duration of treatment is 3-14 days.

9.21. Decubitus ulcers (Bedsore, Pressure Sores)

Bedsore (pressure sores) are a specific type of ulcer caused by impaired blood supply and tissue nutrition resulting from prolonged pressure over bony or cartilaginous prominences. The skin overlying the sacrum and hips is most commonly involved, but bedsore also be seen over the occiput, ears, elbows, heels, and ankles. They occur most readily in aged, paralyzed, debilitated, and unconscious patients. Low-grade infection may occur as a complication.

Treatment

A large number of treatments and protocols exist for management of decubiti. Patient should be instructed to use compression from soft porous materials. Deep infections are commonly present in pressure sores, often requiring systemic antibiotics.

Before the procedure clean the affected area with antiseptic solution. Move slowly the radiator of apparatus MINITAG® above the ulcerative area involving healthy areas for 15-20 minutes. Hold the radiator 2-5 mm above ulcerative areas. The duration of treatment is 5-14 days (continue treatment until new epithelium will cover ulcer). On the first two days hold the therapeutic sessions twice daily.

9.22. Baldness (Alopecia)

There are several known types of alopecia. The informational radiowave therapy is very effective in treating following kinds of alopecia:

1. Baldness not due to scarring. Nonscarring alopecia may occur in association with various systemic diseases such as systemic lupus erythematosus, secondary syphilis, hyper- or hypothyroidism, iron deficiency anemia, and pituitary insufficiency.
2. Telogen effluvium is transitory increase in the number of hairs in the telogen (resting) phase of the hair growth cycle. This may occur spontaneously, may appear at the termination of pregnancy, may be precipitated by “crash dieting”, high fever, stress from surgery or shock, or malnutrition, or may be provoked by hormonal contraceptives. The condition is diagnosed by the presence of large numbers of hairs with white bulbs coming out upon gentle tugging of the hair.
3. Alopecia areata is of unknown cause but is believed to be an immunologic process. Typically, there are patches that are perfectly smooth and without scarring. Tiny hairs 2-3 mm in length, called “exclamation hair”), may be seen. The beard, brows, and lashes may be involved. Involvement may extend to all of the scalp hair (alopecia totalis) or to all scalp and body hair (alopecia universalis).
4. Drug-induced alopecia is becoming increasingly important. Incriminated drugs include thallium, excessively and prolonged use of vitamin A, retinoids, antimitotic agents, anticoagulants, clofibrate (rarely), antithyroid drugs, oral contraceptives, trimethadione, allopurinol, propranolol, indomethacin, amphetamines, salicylates, gentamicin, and levodopa.

Recommended zones for electromagnetic exposure: 16-5(LR-2), 15-4(LU-6), 11-7(TE-1), 10-5(LI-11), 8-3(GB-21), 12-2(PC-3).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area and also locally affected area for 10-15 minutes. The duration of treatment course is 10 days. It is recommended to repeat 6 days' treatment course in 2 weeks in the following 3 months.

9.23. Vitiligo

Vitiligo is characterized by total depigmentation (absence of melanocytes), not just a lessening of pigmentation. The contour of the lesions is definite and often on symmetrical areas of skin. There are usually 1-2 spots or more on the skin. The cause of the disease is unknown. It is acquired after nervous stress or trauma of the head. Patients very often have strong familial predisposition to vitiligo. The therapy of vitiligo is long and tedious. The treatment is directed to achieve cosmetic improvement.

Recommended zones for electromagnetic exposure: 2-6(ST-10), ***8-3***(GB-21), ***9-4***(BL-52), ***10-5***(LI-11),
11-7(TE-1), ***15-4***(KI-6), ***16-5***(LR-2).

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area and also locally depigmented area for 10 minutes. Change the zones during the treatment period. The treatment course is 10 days. Repeat the course of 6 days in 2 weeks during the following 3 months.

Chapter 10. Musculoskeletal disorders

10.1. Cervicobrachial pain syndromes

A large group of articular and extra-articular disorders is characterized by pain that may involve simultaneously the neck, shoulder girdle, and upper extremity. Diagnostic differentiation is often difficult. Some of these entities and clinical syndromes represent primary disorders of the cervicobrachial region; others are local manifestations of systemic disease.

Neck pain may be limited to the posterior neck region or, depending upon the level of the symptomatic joint, may radiate segmentally to the occiput, anterior chest, shoulder girdle, arm, forearm, and hand. It may be intensified by active or passive neck motions. The general distribution of pain and paresthesias corresponds roughly to the involved dermatome in the upper extremity. Radiating pain in the upper extremity is often intensified by hyperextension of the neck and deviation of the head to the involved side. Limitation of cervical movements is the most common objective finding.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **8-5**(BL-13) on the painful side, **10-1**(TE-14) on the painful side, **10-2**(LI-15) on the painful side, **8-4**(SI-14) on the painful side, **12-3**(HT-3) on the painful side.

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. It is recommended to complement the informational radiowave therapy with physical exercises and massages.

10.2. Thoracic outlet syndromes

Thoracic outlet syndromes include those disorders that result in compression of the neurovascular structures supplying the upper extremity. Patients often have a history of trauma to the head and neck areas.

Symptoms and signs arise from intermittent or continuous pressure on elements of the brachial plexus and the subclavian or axillary vessels by a variety of anatomic structures of the shoulder girdle region. The neurovascular bundle can be compressed between the anterior or middle scalene muscles and a normal first thoracic rib or a cervical rib. Faulty posture, chronic illness, and occupation may be other predisposing factors. The components of the median nerve that encircle the axillary artery may cause compression and vascular symptoms.

Pain may radiate from the point of compression to the base of the neck, the axilla, the shoulder girdle region, arm, forearm, and hand. Paresthesias are frequently present and are commonly distributed to the volar aspect of the fourth and fifth digits. Sensory symptoms may be aggravated at night or by prolonged use of the extremities. Weakness and muscle atrophy are the principal motor abnormalities. Vascular symptoms consist of arterial ischemia characterized by pallor of the fingers on elevation of the extremity, sensitivity to cold, and, rarely, gangrene of digits or venous obstruction marked by edema, cyanosis, and engorgement.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **8-5**(BL-13) on the painful side, **10-1**(TE-14) on the painful side, **10-2**(LI-15) on the painful side, **8-4**(SI-14) on the painful side, **12-3**(HT-3) on the painful side.

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. It is recommended to complement the informational radiowave therapy with physical exercises and massages.

10.3. Scapulohumeral periarthrititis (Adhesive capsulitis, Frozen Shoulder)

Periarthritis of the shoulder joint is an inflammatory disorder primarily involving the soft tissues. The condition may be divided into a primary type, which no obvious cause can be identified, and a secondary type associated with an organic lesion (eg, rheumatoid arthritis, osteoarthritis, fracture or dislocation). The primary type is most common among women after the fourth decade. It may be manifested as inflammation of the articular synovia, the tendons around the joint, the intrinsic ligamentous capsular bands, the paratendinous bursae (especially the subacromial), or the bicipital tendon sheath.

The onset of pain, which is aggravated by extremes of shoulder joint motion, may be acute or insidious. Pain may be most annoying at night and may be intensified by pressure on the involved extremity when the patient sleeps in the lateral decubitus position.

Recommended zones for electromagnetic exposure: 3-6(GB-20), 8-2(BL-11), 8-1(GV-14), 8-6(BL-43), 8-4(SI-14), 10-5(LI-11), 11-2(TE-5).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. Repeat the treatment course in 2 weeks if it is necessary. It is recommended to complement the informational radiowave therapy with physical exercises and massages.

10.4. Low back pain

Low back pain is exceedingly common, experienced at some time by up to 80% of the population, and ranks second among reason for doctor office visits. In practice, this means identifying those patients with pain caused by (1) infection, (2) cancer, (3) inflammatory back disease such as ankylosing spondylitis, (4) or nonrheumatologic conditions, especially leaking aortic aneurysm.

If the history and physical examination do not suggest the presence of infection, cancer, inflammatory back disease, major neurologic deficits, or pain referred from abdominal or pelvic disease, further evaluation can be eliminated or deferred while conservative therapy is tried.

The great majority of patients will spontaneously improve with conservative care with MINITAG®.

Recommended zones for electromagnetic exposure: 9-6(BL-25), 9-7(BL-31), 9-11(BL-36), 9-9(GV2), 9-5(GV-3), 9-2(GV-4).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. Since the disorder is often chronic repeat the treatment course in 3 weeks for 4 months. It is recommended to complement the informational radiowave therapy with physical exercises and massages.

10.5. Degenerative joint disease (Osteoarthritis)

Osteoarthritis is the most common form of joint disease, sparing no age, race, or geographic area. This arthropathy is characterized by degeneration of cartilage and by hypertrophy of bone at articular margins. Inflammation is usually minimal. Hereditary and mechanical factors may be variably involved in the pathogenesis. Obesity is a risk factor for knee osteoarthritis and probably for the hip as well. Pathologically, the articular cartilage is first roughened and finally worn away, and spur formation and lipping occur at the edge of the joint surface. The synovial membrane becomes thickened, with

hypertrophy of the villous processes; the joint cavity, however, never becomes totally obliterated, and the synovial membrane does not form adhesions. The onset is insidious. Initially, there is articular stiffness, seldom lasting more than 15 minutes; this develops later into pain on motion of the affected joint and is made worse by activity or weight bearing and relieved by rest. Deformity may be absent or minimal; however, bony enlargement of the interphalangeal joints is occasionally prominent, and flexion contracture or varus deformity of the knee is not unusual.

Education is cornerstone of treatment and may be all that is needed for osteoarthritis of the hands. The informational radiowave therapy has many therapeutic effects: it relieves pain, improves microcirculation, eliminates neurodegenerative changes, induces certain metabolic processes, improves the rheologic blood properties, immune, hormone, enzymatic states of patients, increases specific and nonspecific immunity, activates regenerative process in tissues. The informational radiowave method may be applied for the treatment of epiphyseal aseptic necrosis of femur, deforming arthrosis, deforming arthritis, rheumatoid disease, osteomyelitis; for relieving pain and stimulation of the regenerative process of bones and soft tissues after fractures and surgeries.

Recommended zones for electromagnetic exposure:

For wrist joint pain and pain in the arm – 11-3(TE-4), 11-4(LI-4), 12-10(PC-7);

For elbow joint pain – 10-5(LI-11), 12-3(HT-3), 12-1(LU-5), 11-1(TE-6);

For shoulder joint pain – 8-4(SI-14), 10-2(LI-15), 8-3(GB-21), 10-1(TE-14), 11-1(TE-6), 11-4(LI-4), 12-7(HT-5);

for knee joint pain – 18-3(LR-8), 14-1(BL-40), 13-1(GB-34), 18-5(SP-10), 9-10(GB-30);

for hip joint pain – 16-1(ST-36), 9-11(BL-36), 9-10(GB-30), 9-5(GV-3), 14-1(BL-40);

for ankle joint pain – 13-5(GB-40), 16-4(LR-3), 15-3(KI-3), 13-3(BL-60);

for shoulder and forearm pain – 10-6(LI-10), 10-5(LI-11), 11-1(TE-6);

for leg and foot pain – 13-1(GB-34), 16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. Repeat the treatment course every month. The treatment requires long-term care.

10.6. Gouty arthritis

Gout is a metabolic disease of heterogeneous nature, often familial, associated with abnormal amounts of urates in the body and characterized early by a recurring acute arthritis, usually monarticular, and later by chronic deforming arthritis. The associated hyperuricemia is due to overproduction or underexcretion of uric acid – sometimes both. Secondary gout, which may have heritable component, is related to acquired causes of hyperuricemia, eg, diuretic use, cyclosporine use, myeloproliferative disorders, multiple myeloma, hemoglobinopathies, chronic renal disease, hypothyroidism, and lead poisoning.

The characteristic histologic lesion is the tophus, a nodular deposit of monosodium urate monohydrate crystals, with an associated foreign body reaction. These may be found in cartilage, subcutaneous and periarticular tissues, tendon, bone, the kidneys and elsewhere.

The acute arthritis is characterized by its sudden onset, frequently nocturnal, either without apparent precipitating cause or following rapid fluctuations in serum urate levels from food and alcohol excess, surgery, infection, diuretics, chemicals or uricosuric drugs.

The metatarsophalangeal joint of the great toe is the most susceptible joint (“podagra”), although others, especially those of the feet, ankles, and knees, are commonly affected. Hips and shoulders are rarely involved in gouty arthritis. More than one joint may occasionally be affected during the same attack; in such cases, the distribution of the arthritis is usually asymmetric. As the attack progresses, the pain

becomes intense. The involved joints are swollen and exquisitely tender and the overlying skin tense, warm, and dusky red. Fever is common and may reach high level.

Treatment must be separated by treating the acute arthritis first and hyperuricemia later. Sudden reduction of serum uric acid often precipitates further episodes of gouty arthritis.

Clinical observations are evidenced that the informational radiowave method of the therapy positively effects on musculoskeletal disorders. It relieves pain, improves microcirculation and increases immunity.

Analgesic effect is evident for the management of severe pain. The method relieves pain and increases the range of motion of affected joint.

Recommended zones for electromagnetic exposure:

For elbow joint pain - 10-5(LI-11), 12-3(HT-3), 12-1(LU-5), 11-1(TE-6);

For knee joint pain - 18-3(LR-8), 14-1(BL-40), 13-1(GB-34), 18-5(SP-10), 9-10(GB-30);

For ankle joint pain - 13-5(GB-40), 16-4(LR-3), 15-3(KI-3), 13-3(BL-60);

For leg and foot pain - 13-1(GB-34), 16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. Repeat the treatment course every month. All patients need long-term care and stick to the strict diet since the disease has the tendency to chronicity.

10.7. Rheumatoid arthritis

Rheumatoid arthritis is a chronic systemic inflammatory disease of unknown cause, chiefly affecting synovial membranes of multiple joints. The usual age at onset is 20-40 years, although rheumatoid arthritis may begin at any age. Susceptibility to rheumatoid arthritis is genetically determined.

The pathologic findings in the joint include chronic synovitis with pannus formation. The pannus erodes cartilage, bone, ligaments, and tendons. In the acute phase, effusion and other manifestations of inflammation are common. In the late stage, organization may result in fibrous ankylosis; true bony ankylosis is rare. In both acute and chronic phases, inflammation of soft tissues around the joints may be prominent and is a significant factor in joint damage.

The clinical manifestations of rheumatoid disease are highly variable. There is characteristically symmetric joint swelling with associated stiffness, warmth, tenderness, and pain. Stiffness is prominent in the morning and subsides during the day; its duration is a useful indicator of activity of disease. Stiffness may recur after daytime inactivity and may be much more severe after strenuous activity.

The primary objectives in treating rheumatoid arthritis are reduction of inflammation and pain, preservation of function, and prevention of deformity.

Recommended zones for electromagnetic exposure:

For wrist joint pain and pain in the arm – 11-3(TE-4), 11-4(LI-4), 12-10(PC-7);

For elbow joint pain – 10-5(LI-11), 12-3(HT-3), 12-1(LU-5), 11-1(TE-6);

For shoulder joint pain – 8-4(SI-14), 10-2(LI-15), 8-3(GB-21), 10-1(TE-14), 11-1(TE-6), 11-4(LI-4), 12-7(HT-5);

for knee joint pain – 18-3(LR-8), 14-1(BL-40), 13-1(GB-34), 18-5(SP-10), 9-10(GB-30);

for hip joint pain – 16-1(ST-36), 9-11(BL-36), 9-10(GB-30), 9-5(GV-3), 14-1(BL-40);

for ankle joint pain – 13-5(GB-40), 16-4(LR-3), 15-3(KI-3), 13-3(BL-60);

for shoulder and forearm pain – 10-6(LI-10), 10-5(LI-11), 11-1(TE-6);

for leg and foot pain – 13-1(GB-34), 16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Before the therapeutic session find the most painful points and expose them for 3-5 minutes. The treatment course is 10-12 days. Repeat the treatment course every month. in 2 weeks if there is necessity for it. Since the disorder is often chronic all patients need long-term care.

10.8. Reiter's syndrome (Reactive Arthritis)

Reiter's syndrome, also called "reactive arthritis", is a clinical tetrad of urethritis, conjunctivitis, mucocutaneous lesions, and arthritis. Most cases of Reiter's syndrome develop within days or weeks of either a dysenteric infection (with Shigella, Salmonella, Yersinia, Campylobacter) or a sexually transmitted infection (with Chlamydia trachomatis or perhaps Ureaplasma urealyticum).

The arthritis is most commonly asymmetric and frequently involves the large weight-bearing joints (chiefly the knee and ankle). The mucocutaneous lesions may include balanitis, stomatitis, and keratoderma blennorrhagicum. Carditis and aortic regurgitation may occur. While most signs of the disease disappear within days or weeks, the arthritis may persist for several months or even years. NSAIDs and antibiotics have been the mainstay of therapy.

Recommended zones for electromagnetic exposure:

For upper extremity involvement: 8-1(GV-14), 8-2(BL-11), 11-4(LI-4), 10-5(LI-11), 12-7(HT-5), 12-4(PC-6), 12-5(LU-7), 11-3(TE-4), 10-4(SI-8);

Use 5-6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The treatment course is 10 days. Repeat the treatment course in 2 weeks during for 3 months.

For lower extremity involvement: 16-1(ST-36), 15- 1(SP-6), 13-2(GV-39), 16-9(GB-43), 16-3(ST-41), 13-4(BL-62).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days. Repeat the treatment course in 2 weeks during 6 months.

10.9. Epicondylitis (Tennis Elbow, Epicondylalgia)

Epicondylitis is a pain syndrome affecting the mid portion of the upper extremity; no single causative lesion has been identified. It has been postulated that chronic strain of the forearm muscles due to repetitive grasping or rotatory motions of the forearm causes microscopic tears and subsequent chronic inflammation of the common extensor or common flexor tendon at or near their respective osseous origins from the epicondyles.

Epicondylitis occurs most frequently in the dominant extremity during middle life. Pain is predominantly on the medial or lateral aspect of the elbow region, may be aggravated by grasping, and may radiate proximally into the arm or distally into the forearm. The elbow joint has normal range of motion, is not swollen, and appears normal x-ray.

Treatment is directed toward relief and NSAIDs. An elastic bandage applied about the proximal forearm may ameliorate discomfort when the patient is grasping forcefully.

Infiltration of "trigger points" by local anesthetic solutions may be helpful. Operative treatment is reserved for severe, refractory cases.

Recommended zones for electromagnetic exposure: 3-7(BL-10), 8-2(BL-11), 8-4(SI-14), 12-3(HT-3), 12-1(LU-5), 11-2(TE-5).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Before the therapeutic session find the most painful points and expose them for 3-5 minutes. Change the zones during the treatment course. The treatment course is 10 days. Repeat the treatment course in 2 weeks if there is necessity for it.

10.10. Bursitis

Inflammation of the synovium-like cellular membrane overlying bony prominences may be secondary to trauma, infection, or arthritic conditions such as gout, rheumatoid arthritis, or osteoarthritis. The most common locations are the subdeltoid, olecranon, ischial, trochanteric, semimembranosus-gastrocnemius (Baker's cyst) and prepatellar bursae.

There are several ways to distinguish bursitis from arthritis. Bursitis is more likely than arthritis to begin abruptly and cause focal tenderness and swelling. Olecranon bursitis, for example, causes a "goose egg" swelling at the tip of the elbow, whereas elbow joint inflammation causes more diffuse swelling. Active and passive ranges of motion are usually limited.

Recommended zones for electromagnetic exposure:

For shoulder pain – 10-1(TE-14), *10-2*(LI-15), *8-4*(SI-14);

For elbow pain – 10-4(SI-8), *12-2*(PC-3), *10-3*(TE-10), *12-1*(LU-5);

For ankle joint pain – 13-3(BL-60), *13-4*(BL-62), *15-6*(SP-4), *16-4*(LR-3);

For ankle pain – 18-3(LR-8), *14-1*(BL-40), *18-5*(SP-10), *16-1*(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area and locally on the painful points. The treatment course is 10-12 days. It is recommended to repeat the treatment course in 2 weeks.

10.11. Fibrositis

Fibrositis (also called fibromyalgia) is one of the most common rheumatic syndromes in ambulatory general medicine affecting 3-10% of the general population. It shares many features with the chronic fatigue syndrome, namely, and increased frequency among women aged 20-50, absence of objective findings, and absence of diagnostic laboratory tests.

The cause is unknown, but sleep disorders, depression, viral infection, and aberrant perception of normal stimuli have been proposed. Fibrositis can be a complication of hypothyroidism, rheumatoid arthritis, or, in men, sleep apnea.

The patients complain of chronic aching pain and stiffness, frequently involving the entire body but prominence of pain around the neck, shoulders, low back, and hips. Fatigue, sleep disorders, subjective numbness, chronic headaches, and irritable bowel symptoms are common.

Patient education is of paramount importance. Patients can be comforted by the knowledge that they have a recognizable diagnosable syndrome that can be managed by means of specific though imperfect therapies and that the course is not progressive.

Recommended zones for electromagnetic exposure: 3-6(GB-20), ***3-7***(BL-10), ***8-2***(BL-11), ***8-7***(BL-15),
12-10(PC-7), ***12-14***(PC-9), ***12-4***(PC6), ***12-6***(LU-9),
10-5(LI-11), ***16-1***(ST-36), ***15-1***(SP-6), ***8-6***(BL-43).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Before the therapeutic session find the most painful points and expose them for 3-5 minutes. Change the zones during the treatment course. The treatment course is 10 days. Repeat the treatment course in 3 weeks during 4 months and prophylactic course twice a year.

10.12. Jogging injuries

The beneficial effects on cardiovascular function and the sense of well-being associated with aerobic activity have led to considerable enthusiasm for jogging and running. This has resulted in a large number of transient musculoskeletal injuries, which are estimated to occur in about 75% of runners. Many of the deleterious effects can be prevented by appropriate precautions, such as stretching exercises, proper footwear, avoidance of overexertion, and prompt attempt to injuries. After an injury has healed, a graduated schedule for returning to training is necessary to avoid recurrence. Since injuries occur frequently in long-distance runners, it is most important that these individuals avoid overexertion, and, when early signs of injury appear, reduce the distance run.

Recommended zones for electromagnetic exposure:

For hip joint injury: **16-1**(ST-36), **9-11**(BL-36), **9-10**(GB-30), **14-1**(BL-40), **9-5**(GV-3).

For knee joint injury: **18-3**(LR-8), **14-1**(BL-40), **18-5**(SP-10), **16-1**(ST-36).

For ankle joint injury: **14-1**(BL-40), **15-8**(KI-1), **15-3**(KI-3), **13-3**(BL-60).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area and locally on the painful points for 10 minutes. The treatment course is 10-20 days.

10.13. Systemic lupus erythematosus

Systemic lupus erythematosus (SLE) is an inflammatory autoimmune disorder that may affect multiple organ systems. Many of its clinical manifestations are secondary to the trapping of antigen-antibody complexes in capillaries of visceral structures or to autoantibody-mediated destruction of host cells (eg, thrombocytopenia).

The clinical course is marked by spontaneous remission and relapses. The severity may vary from a mild episodic disorder to a rapidly fulminating fatal illness.

The systemic features include fever, anorexia, malaise, and weight loss. Most patients have skin lesions at some time. Alopecia is common. Mucous membrane lesions tend to occur during periods of exacerbation.

Joint symptoms with or without active synovitis, occur in over 90% of patients and are often the earliest manifestation. The arthritis is seldom deforming; erosive changes are almost never noted on x-ray study.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **3-6**(GB-20), **12-10**(PC-7), **5-5**(CV-17),
7-3(CV-8), **7-4**(CV-6), **15-1**(SP-6), **16-5**(LR-2),
10-5(LI-11).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The treatment course is 8-10 days. It is recommended to repeat treatment course in 2 weeks during 6 months. Treatment is long-term.

10.14. Progressive systemic sclerosis (Scleroderma)

Progressive systemic sclerosis is a chronic disorder characterized by diffuse fibrosis of the skin and internal organs. The causes of scleroderma are not known, but autoimmunity, fibroblast dysregulation, and occupational exposure to silica have been implicated. Symptoms usually appear in the third to fifth decades, and women are affected two to three times as frequently as men.

Scleroderma may be localized or systemic. Localized scleroderma – morphea, linear scleroderma – is not associated with visceral organ involvement and is therefore benign. Two forms of systemic scleroderma are generally recognized: diffuse (20% of patients) and limited (80%).

Treatment of progressive systemic sclerosis is symptomatic and supportive.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **2-3**(CV-24), **1-9**(ST-2), **16-1**(ST-36),
15-1(SP-6), **10-5**(LI-11), **12-2**(PC-3), **14-1**(BL-40),
13-1(GB-34).

Use 6 zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The treatment course is 10 days. It is recommended to repeat therapy in 2 weeks during 6 months. The treatment is long-term.

10.15. Polymyositis-dermatomyositis

Polyomyositis is a systemic disorder of unknown cause whose principal manifestation is muscle weakness. It is the most frequent primary myopathy in adults. When skin manifestations are associated with it, the entity is designated dermatomyositis. The disease may affect persons of any age group, but the peak incidence is in the fifth and sixth decades of life. Women are affected twice as commonly as men.

Polyomyositis may begin abruptly, although often it is gradual and progressive. The characteristic rash is dusky red and may be seen over the butterfly area of the face, neck, shoulders, and upper chest and back. Periorbital edema and a purplish (heliotrope) suffusion over the upper eyelids are typical signs. Bilateral proximal muscle weakness and in some cases pain and tenderness of affected muscles occur in one-fourth of cases.

Most patients respond to informational radiowave therapy. There is no any effective pharmacologic agent. The informational radiowave therapy has ameliorative action on the pathogenic factors that bring pathologic changes in the muscles: the vegetative innervation of the muscle is improved and the function of the cells of spinal cord is normalized.

Recommended zones for electromagnetic exposure: 8-1(GV-14), **12-4**(PC-6), **3-6**(GB-20)

Extra points

For skeletal muscles of shoulder and forearm involvement: 8-2(BL-11), **8-4**(SI-14), **10-2**(LI-15),
10-1(TE-14).

For skeletal muscles of lower extremity involvement: 18-5(SP-10), **9-10**(GB-30), **13-1**(GB-34),
16-1(ST-36).

Use 5 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10-12 days. It is recommended to repeat the treatment course in 2 weeks during 3 months. It is necessary to do regular supportive therapy.

Chapter 11. Genitourinary disorders

11.1. Acute cystitis

Acute cystitis is an infection of the bladder most commonly due to the coliform bacteria (especially *E coli*) and occasionally gram-positive bacteria (enterococci). Viral cystitis due to adenovirus is sometimes seen in children but is rare in adults. The route of infection is ascending from the urethra. Irritative voiding symptoms are common (frequency, urgency, dysuria) as well as suprapubic discomfort. Women may demonstrate gross hematuria, and symptoms in women may often appear following sexual intercourse. Physical examination may elicit suprapubic tenderness, but examination is often unremarkable.

Uncomplicated cystitis can be treated with short-term antimicrobial therapy.

The applying informational radiowave therapy in combination with pharmacologic agents and diet reduces the pain, normalizes urination, promotes rapid respond to therapy, and prevents the development of chronic cystitis.

Recommended zones for electromagnetic exposure: 7-8(CV-3), 9-8(BL-28), 9-3(BL-23), 14-1(BL-40), 15-4(KI-6), 15-1(SP-6), 16-5(LR-2), 16-1(ST-36), 13-7(BL-67).

Use 5-6 recommended zones for therapeutic session daily. Expose for 5 minutes each area. Change the zones during treatment course. The duration of the treatment course is 8-10 days. Chronic stage requires repeated 5days treatment course in 2 weeks during 2 months.

11.2. Pyelonephritis

Acute pyelonephritis is an infectious inflammatory disease involving the kidney parenchyma and renal pelvis. Gram-negative bacteria are the most common causative agents including *E coli*, *Proteus*, *Klebsiella*, *Enterobacter*, and *Pseudomonas*. Gram-positive bacteria are less commonly seen, including *Enterococcus faecalis* and *Staphylococcus aureus*. The infection usually ascends from the lower urinary tract – with the exception of *S aureus*, which usually is spread by hematogenous route.

Symptoms include fever, flank pain, shaking chills, and irritative voiding symptoms (urgency, frequency, dysuria). Nausea and vomiting and diarrhea are not common. Signs include fever and tachycardia. Costovertebral angle tenderness is usually pronounced.

Severe infections or complicating factors require hospital admission. Urine and blood culture are obtained to identify the causative agent and to determine antimicrobial sensitivity.

Acute pyelonephritis requires hospitalization with drugs therapy complemented with informational radiowave therapy and diet. The applying of the informational radiowave therapy prevents the development of the complications of acute pyelonephritis.

Chronic pyelonephritis may be managed with the informational radiowave therapy as monotherapy.

Recommended zones for electromagnetic exposure: 8-1(GV-14), 11-4(LI-4), 16-1(ST-36), 15-8(KI-1), 15-3(KI-3), 9-3(BL-23), 7-7(ST-28), 7-4(CV-6), 15-1(SP-6), 6-8(LR-13).

Use 5-6 recommended zones for therapeutic session daily. Expose for 5 minutes each area. Change the zones during treatment course. The duration of the treatment course is 10 days. Chronic stage requires repeated 7days treatment course in 3 weeks during 2 months.

11.3. Tubulointerstitial nephritis

Tubulointerstitial nephritis is an inflammatory disorder of the renal interstitium in which the immune system plays a significant role pathogenetically. Although both humoral and cell-mediated reactions have been implicated, the most prevalent forms of interstitial nephritis involve only the cell-mediated immune response. T lymphocytes may damage the interstitium through direct cytotoxicity or by releasing lymphokines that recruit monocytes and inflammatory cells, including eosinophils.

1) Allergic tubulointerstitial nephritis. Fifteen percent of cases of acute renal failure are caused by acute tubulointerstitial nephritis. If no causative factors are found, the disease is presumed to be autoimmune in origin; most cases are drug-related. Acute tubulointerstitial nephritis presents as a sudden decrease in renal function in an otherwise asymptomatic patient who has been taking a new medication. Signs and symptoms characteristic of an allergic reaction are common and include fever, and transient maculopapular rash. Bilateral or unilateral flank pain is often described and occurs as a result of distention of the renal capsule as the kidneys swell. Although a number of drugs are reported to cause acute tubulointerstitial nephritis, those implicated most frequently are the beta-lactam antibiotics (methicillin, ampicillin, cephalosporins) and the NSAIDs. Other responsible drugs are rifampin, sulfonamides, thiazides and furosemide, and cimetidine. Treatment consists of discontinuation of the offending drug.

2) Chronic tubulointerstitial nephritis. The causes of chronic tubulointerstitial nephritis are numerous. The most common cause is prolonged obstruction of the urinary tract, followed by reflux nephropathy. Analgesic abuse can be associated with both renal failure and chronic tubulointerstitial nephritis, and its prevalence is often dependent on the region or country of residence. Environmental exposure to heavy metals (lead and cadmium) – may also be an important cause. Polyuria and nocturia are the most frequent clinical complaints that occur because of an inability to concentrate the urine. Treatment depends first upon identifying the underlying disorder responsible for the renal dysfunction.

Recommended zones for electromagnetic exposure:

First day – 16-1(ST-36), 15-2(KI-7), 15-1(SP-6), 7-8(CV-3), 16-5(LR-2), 11-7(TE-1).

Second day - 3-6(GB-20), 12-4(PC-6), 15-3(KI-3), 10-5(LI-11), 9-4(BL-52), 7-4(CV-6).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment course is 10-12 days. It is recommended to repeat treatment course in 4 weeks during for 6 months.

11.4. Glomerulonephritis

Glomerulonephritis is an inflammatory process primarily involving the glomerulus, though at times the renal vasculature, interstitium, and tubular epithelium may also be affected. Glomerular inflammation can result in damage to any of the three major components of the glomerulus: the basement membrane, the mesangium, or the capillary endothelium.

There are several types of glomerulonephritis:

1. Acute Glomerulonephritis that frequently occurs as a late complication of pharyngitis or skin infection, due to a nephritogenic strain of β -hemolytic streptococci, characterized by abrupt onset of hematuria, edema of the face, oliguria, and variable azotemia and hypertension; the renal glomeruli usually show cellular proliferation or infiltration by polymorphonuclear leucocytes.

2. Chronic Glomerulonephritis that represents with persisting proteinuria, chronic renal failure, and hypertension, of insidious onset or as a late sequel of acute Glomerulonephritis; the kidneys are symmetrically contracted and granular, with scarring and loss of glomeruli and the presence of tubular atrophy and interstitial fibrosis.

Acute glomerulonephritis requires hospitalization including intensive care with pharmacologic agents and the informational radiowave therapy, diet (salt restriction, 500-600 ml of fruit juices, cottage cheese, liquids restriction).

Recommended zones for electromagnetic exposure: 3-1(GV-20), **10-5**(LI-11), **16-1**(ST-36), **15-3**(KI-3), **15-2**(KI-7), **4-3**(TE-20), **11-7**(TE-1), **3-6**(GB-20), **12-4**(PC-6), **7-4**(CV-6), **7-8**(CV-3).

Use 5-6 recommended zones for therapeutic session daily. Expose for 5 minutes each area. Change the zones during treatment course. The duration of the treatment course is 10-12 days. Acute stage requires therapeutic sessions twice a day. It is recommended to do 6 days treatment course in 2 weeks during 3 months.

11.5. Urinary stone disease

Urinary stone disease is exceeded in frequency as a urinary tract disorder only by infections and prostatic disease and is estimated to afflict 240,000-720,000 Americans per year. Men are more frequently affected by urolithiasis than women, with a ratio of 4:1. Initial presentation predominates in the third and fourth decades. Urinary calculi are polycrystalline aggregates composed of varying amounts of crystalloid and a small amount of organic matrix.

Diet and fluid intake may be important factors in the development of urinary stones. Those afflicted with recurrent urinary stone disease should be encouraged to maintain a diet restricted in sodium and protein intake. Water or other fluid intake is important in preventing urolithiasis. Persons in sedentary occupations have a higher incidence of stones than manual laborers.

Geographic factors contribute to the development of stones. Areas of high humidity and elevated temperatures appear to be contributing factors, and incidence of symptomatic ureteral stones is greatest during hot summer months.

Genetic factors may contribute to urinary stone formation.

Obstructing urinary stones usually present with acute colic. Pain usually occurs suddenly and may awaken patients from sleep. It is localized to the flank, is usually severe, and may be associated with nausea and vomiting. If the stone becomes lodged at the ureterovesical junction, patients will complain of marked urinary urgency and frequency. Stone size does not correlate with the severity of the symptoms.

To reduce the recurrence rate of urinary stones, one must attempt to achieve a stone-free status. Of greatest importance in reducing stone recurrence is an increased fluid intake.

The informational radiowave therapy is indicated in combination with any method of treatment since it has nonspecific anti-inflammatory, disintoxicational, antispasmodic action.

Recommended zones for electromagnetic exposure: 9-3(BL-23), **9-8**(BL-28), **14-1**(BL-40), **15-5**(KI-2), **18-2**(CV-1), **7-8**(CV-3), **15-1**(SP-6), **16-4**(LR-3), **6-8**(LR-13), **16-1**(ST-36).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The duration of the treatment is 10-12 days. Acute stage during the attack of renal colic requires to hold therapeutic sessions twice a day, then continue with one therapeutic session a day. It is recommended to do 6 days treatment course in 3 weeks during 4 months.

11.6. Enuresis (urinary incontinence)

Enuresis is involuntary discharge or leakage of urine. The causes include bladder disorders (sphincter incompetence, detrusor underactivity, infections etc) and nervous diseases.

The treatment is directed to elimination of underlying cause.

In false incontinence (patent urachus, ectopic ureteric orifice into vagina etc) the surgery is required, in other cases the nonsurgical methods are applied. The psychoemotional rehabilitation is required in all cases.

The informational radiowave therapy is the method of choice since it has majority of nonspecific actions on integral body of children and adults. The treatment plan provides the elimination of etiopathogenetic factors and psychoemotional rehabilitation.

Recommended zones for electromagnetic exposure:

First day: 3-1(GV-20), 5-5(CV-17), 12-9(HT-7), 9-3(BL-23), 9-7(BL-31), 9-2(GV-4),

Second day: 4-3(TE-20) left and right sides, 18-1(GV-1), 18-4(SP-9), 13-7(BL-67), 7-6(CV-4), 16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment course is 10 days. Repeat the 5 days treatment course in 4 weeks during 3 months.

11.7. Bacterial prostatitis

Acute bacterial prostatitis is usually caused by gram-negative rods, especially E coli and Pseudomonas species and less commonly by gram-positive organisms (eg, Enterococcus). The most likely routes of infection include ascent up the urethra and reflux of infected urine into the prostatic ducts. Lymphatic and hematogenous routes are probably rare.

Perineal, sacral, or suprapubic pain, fever, and irritative voiding complaints are common. Varying degrees of obstructive symptoms may occur as the acutely inflamed prostate swells, which may lead to urinary retention. High fevers and a warm and tender prostate are detected on examination. Care should be taken in performing a gentle rectal examination, as vigorous manipulations may result in septicemia. Prostatic massage is contraindicated.

Hospitalization is usually required and parenteral antibiotics should be initiated.

Although chronic bacterial prostatitis may evolve from acute bacterial prostatitis, many men have no history of acute infection. Gram-negative rods are the most common etiologic agents, but only gram-positive (Enterococcus) is associated with chronic infection. Routes of infection are the same as discussed for acute infection.

Clinical manifestations are variable. Some patients are asymptomatic, but most have varying degrees of irritative voiding symptoms. Low back and perineal pain is not uncommon. Many patients report a history of urinary tract infections. Physical examination is often unremarkable, though the prostate may feel normal, boggy, or indurated.

Few antimicrobial agents attain therapeutic intraprostatic levels in the absence of acute inflammation.

The goal of the treatment of any stage is eradication of infectious pathogen and functional recovery of prostate.

The informational radiowave therapy complemented with antibacterial therapy and massage of the prostate increases the efficiency of the treatment owing to the improvement of intracellular prostate microcirculation and immune state of the body.

Recommended zones for electromagnetic exposure: 18-2(CV-1), 18-1(GV-1), 16-4(LR3), 16-1(ST-36), 15-5(KI-2), 15-2(KI-7), 13-7(BL-67), 9-9(GV-2), 7-8(CV-3), 7-11(SP-12).

Use 5-6 recommended zones for therapeutic session daily. Expose for 5 minutes each area. Change the zones during treatment course. The duration of the treatment course is 10-12 days. Acute stage requires to hold therapeutic sessions twice a day, continue with one session a day. It is recommended to repeat the treatment course every month during 4 months and regular physical exercises (jogging, walking, bicycling, skating, skiing).

11.8. Nonbacterial prostatitis

Nonbacterial prostatitis is the most common of the prostatitis syndromes, and its causes include blood congestion in pelvis due to sedentary life-style. Speculation implicates chlamydiae, mycoplasmas, *Ureaplasma*, and viruses, but no substantial proof exists. Nonbacterial prostatitis is believed to represent a noninfectious inflammatory disorder. Some investigators believe that it is an autoimmune disease. Nonbacterial prostatitis is thus a diagnosis of exclusion. The clinical presentation is identical to that of chronic bacterial prostatitis; however, no history of urinary tract infections is present. Because of the uncertainty regarding the etiology of nonbacterial prostatitis, a trial of antimicrobial therapy directed against *Ureaplasma*, *Mycoplasma* or *Chlamydia* is warranted.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **4-3**(TE-20), **18-1**(GV-1), **18-2**(CV-1),
7-11(SP-12), **7-7**(ST-28), **13-3**(BL-60), **15-8**(KI-1),
16-1(ST-36).

Use 5-6 recommended zones for therapeutic session daily. Expose for 5 minutes each area. Change the zones during treatment course. The duration of the treatment course is 10-12 days. It is recommended to repeat the treatment course in 4 weeks during 6 months. The treatment is long-term.

11.9. Prostatodynia

Prostatodynia is a noninflammatory disorder that affects young and middle-aged men and has variable causes, including voiding dysfunction and pelvic floor musculature dysfunction. The term “prostatodynia” is a misnomer, as the prostate is actually normal. Symptoms are the same as those seen with chronic prostatitis, yet there is no history of urinary tract infection. Additional symptoms may include hesitancy and interruption of flow. Patients may relate a lifelong history of voiding difficulty. Physical examination is unremarkable, but increased anal sphincter tone and paraprostatic tenderness may be observed.

Recommended zones for electromagnetic exposure: **7-1**(GB-26), **7-9**(CV-2), **7-10**(ST-30), **7-11**(SP-12),
9-9(GV-2), **15-1**(SP-6), **13-6**(BL-65), **16-4**(LR-3).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area and locally on the scrotum for 10 minutes. Change the zones for electromagnetic exposure during the treatment course. The duration of the treatment is 10 days.

11.10. Acute epididymitis

Most cases of acute epididymitis are infectious and can be divided into one of two categories that have different age distributions and etiologic agents. Sexually transmitted forms typically occur in men under age 40, are associated with urethritis, and result from *C trachomatis* or *N gonorrhoeae*. Non-sexually transmitted forms typically occur in older men, are associated with urinary tract infections and

prostatitis, and are caused by gram-negative rods. The route of infection is probably via the urethra to the ejaculatory duct and then down the vas deferens to the epididymis.

Symptoms may follow acute physical strain (heavy lifting), trauma, or sexual activity. Associated symptoms of urethritis (pain at the tip of the penis and urethral discharge) or cystitis (irritative voiding symptoms) may occur. Pain develops in the scrotum and may radiate along the spermatic cord or to the flank. Fever and scrotal swelling are usually apparent. Early in the course, the epididymis may be distinguishable from the testis; however, later the two may appear as one enlarged, tender mass. The prostate may be tender on the rectal examination.

Bed rest with scrotal elevation is important in the acute phase. Treatment is antibacterial toward the pathogen.

The pharmacologic treatment is complemented with informational radiowave therapy.

Recommended zones for electromagnetic exposure: 8-1(GV-14), **7-7**(ST-28), **7-11**(SP-12), **10-5**(LI-11), **15-1**(SP-6), **16-4**(LR-3), **18-1**(GV-1), **18-2**(CV-1).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area and locally on injured area for 10 minutes. Change the zones for electromagnetic exposure during the treatment course. The duration of the treatment is 10 days.

11.11. Hydrocele

A hydrocele is a collection of fluid between the two layers of the tunica vaginalis. The diagnosis readily made by transillumination. The causes include inflammatory process of the testis and epididymis or disturbances of drainage function (varix dilatation of pelvis, lymphadenitis).

Early informational radiowave therapy is effective. The applying of informational radiowave therapy in pediatric practice gives also good results. In long-existing hydrocele informational radiowave therapy relieves the symptoms though the complete recovery can not be achieved.

Recommended zones for electromagnetic exposure: 7-1(GB-26), **7-9**(CV-2), **7-10**(ST-30), **7-11**(SP-12), **9-9**(GV-2), **15-1**(SP-6), **13-6**(BL-65), **16-4**(LR-3).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area and locally on scrotum for 10 minutes. Change the zones for electromagnetic exposure during the treatment course. The duration of the treatment is 10 days. It is recommended to repeat the treatment course in 3 weeks during 2 months.

11.12. Varicocele

A varicocele is engorgement of the internal spermatic veins above the testis. These almost always occur on the left side as the left spermatic vein empties into the left renal vein while the right spermatic vein empties into the inferior vena cava. Varicoceles should diminish in size or disappear with the patient in the supine position. The surgery is required in case infertility or manifestations of the symptoms (pain, sense of “overfilling” in scrotum).

Early informational radiowave therapy is effective. The applying of informational radiowave therapy in pediatric practice gives also good results. In long-existing varicocele informational radiowave therapy relieves the symptoms though the complete recovery is not achieved.

Recommended zones for electromagnetic exposure: 7-1(GB-26), **7-9**(CV-2), **7-10**(ST-30), **7-11**(SP-12), **9-9**(GV-2), **15-1**(SP-6), **13-6**(BL-65), **16-4**(LR-3).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area and locally on scrotum for 10 minutes. Change the zones for electromagnetic exposure during the treatment course. The duration of the treatment is 10 days. It is recommended to repeat the treatment course in 3 weeks during 2 months.

11.13. Benign prostatic hyperplasia

Benign prostatic hyperplasia is a common disorder, and its incidence is age-related. The cause is not completely understood but seems to be multifactorial and under endocrine control. The prostate is composed of both stromal and epithelial elements, and each – alone or in combination – can give rise to hyperplastic nodules and the symptoms associated with hyperplasia of the organ.

Benign prostatic hyperplasia may be associated with both obstructive and irritative voiding symptoms. Obstructive symptoms include decreased force and caliber of the urinary stream, an intermittent stream, and urinary hesitancy. Irritative symptoms, which may be a consequence of bladder dysfunction, include urinary frequency, nocturia, and urgency.

The informational radiowave therapy is indicated in all stages of the disorder. On the first and second stages informational radiowave therapy is complemented with nonsurgical measures. On third and fourth stages informational radiowave therapy is used for pre- and postoperative care to shorten rehabilitation time and prevention of complications.

Recommended zones for electromagnetic exposure: 3-1(GV-20), ***4-3***(TE-20), ***18-1***(GV-1), ***18-2***(CV-1), ***7-11***(SP-12), ***7-7***(ST-28), ***13-3***(BL-60), ***15-8***(KI-1), ***16-1***(ST-36).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The duration of the treatment is 10-12 days. It is recommended to repeat the treatment course in 4 weeks during 6 months. The long-term treatment is required.

11.14. Male erectile dysfunction & sexual dysfunction

Impotence is defined as the consistent inability to maintain an erect penis with sufficient rigidity to allow sexual intercourse. Approximately 25% of all men older than age 65 suffer from this disorder. Most cases of male erectile disorders have an organic rather than a psychogenic cause. Normal male erection is a neurovascular phenomenon relying on an intact autonomic and somatic nerve supply to the penis, smooth and striated musculature of the corpora cavernosa and pelvic floor, and arterial inflow supplied by paired pudendal arteries. Erection is precipitated and maintained by an increase in arterial flow, active relaxation of the smooth muscle elements of the sinusoids within the corporal bodies of the penis, and an increase in venous resistance.

A loss of libido may indicate androgen deficiency on the basis of either hypothalamic, pituitary or testicular disease.

Loss of erections may result from arterial, venous, neurogenic, or psychogenic causes.

The loss of emission (lack of antegrade seminal fluid during ejaculation) may result from several underlying disorders.

Retrograde ejaculation may occur as a result of mechanical disruption of the bladder neck, especially following transurethral resection of the prostate or sympathetic denervation as a result of medications (alpha-blockers), diabetes mellitus, or radical pelvic or retroperitoneal surgery.

If libido and erection are intact, the loss of orgasm is usually of psychologic origin.

Premature ejaculation is usually an anxiety-related disorder and rarely has an organic cause.

The informational radiowave method may be used in combination with other methods including surgical. Physician for each person detects the treatment regimen individually.

Recommended zones for electromagnetic exposure:

First day – **3-1**(GV-20), **18-2**(CV-1), **12-10**(PC-7), **15-1**(SP-6), **15-3**(KI-3), **18-3**(LR-8).

Second day - **4-3**(TE-20) left and right sides, **18-1**(GV-1), **18-4**(SP-9), **13-7**(BL-67), **7-6**(CV-4),
16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of the treatment course is 10 days. Repeat the treatment course every month during 4 months.

11.15. Vaginitis

Inflammation and infection of the vagina are common gynecologic problems, resulting from a variety of pathogens, allergic reactions to vaginal contraceptives or other products, or the friction of coitus. The normal vaginal pH is 4.5 or less, and *Lactobacillus* is the predominant organism. At the time of midcycle estrogen surge, clear, elastic, mucoid secretions from the cervical os are often profuse. In the luteal phase and during pregnancy, vaginal secretions are thicker, white, and sometimes adherent to the vaginal walls. These normal secretions can be confused with vaginitis by concerned women. When the patient complains of vaginal irritation, pain, or unusual discharge, a careful history should be taken, noting the onset of the last menstrual period; recent sexual activity; use of contraceptives, tampons, or douches; and the presence of vaginal burning, pain, pruritus, or unusually profuse or malodorous discharge.

Recommended zones for electromagnetic exposure: **9-5**(GV-3), **18-2**(CV-1), **15-5**(KI-2), **15-1**(SP-6),
9-7(BL-31), **7-10**(ST-30), **7-11**(SP-12).

Extra points

For genital pruritus: **7-4**(CV-6);

For genital swelling: **9-8**(BL-28), **16-4**(LR-3).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to hold therapeutic sessions twice daily in acute stage, continue with once a day. If it is necessary repeat the treatment course in 2-4 weeks.

11.16. Cervicitis

Infection of the cervix must be distinguished from physiologic ectopy of columnar epithelium, which is common in young women. Cervicitis is characterized by a red edematous cervix with purulent, often blood-streaked discharge and tenderness on cervical motion. The infection may follow tears during delivery or abortion or may result from sexually transmitted pathogen such as *Neisseria gonorrhoeae*, *Chlamydia*, or *herpesvirus* (which presents with vesicles and ulcers on the cervix during a primary herpetic infection). Yellow mucopurulent endocervical secretions and the presence of ten or more polymorphonuclear leucocytes per high dry field are suggestive of chlamydial infection. The informational radiowave therapy is complemented with surgical or nonsurgical methods of treatment. The therapy is directed to functional recovery and improvement of immune, endocrine and reproductive systems.

Recommended zones for electromagnetic exposure: **7-9**(CV-2), **7-8**(CV-3), **15-1**(SP-6), **9-8**(BL-28),
18-3(LR-8), **16-1**(ST-36), **10-5**(LI-11), **4-3**(TE-20).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days.

11.17. Pelvic inflammatory disease (PID, Salpingitis, Endometritis)

Pelvic inflammatory disease is a polymicrobial infection of the upper genital tract associated with sexually transmitted organisms *N gonorrhoeae* and *C trachomatis* as well as endogenous organisms, including anaerobes, *H influenzae*, enteric gram-negative rods, and streptococci. It is most common in young, nulliparous, sexually active women with multiple partners. Other risk markers include nonwhite race, douching, and smoking.

Patients with pelvic inflammatory disease may have lower abdominal pain, chills and fever, menstrual disturbances, purulent cervical discharge, and cervical and adnexal tenderness. Right upper quadrant pain may indicate an associated perihepatitis. However, diagnosis of PID is complicated by the fact that many women may have subtle or mild symptoms, not readily recognized as PID. Women with lower abdominal, adnexal, or cervical motion tenderness should be considered to have PID and be treated with antibiotics.

11.17.1. Endometritis

Acute endometritis and exacerbations of chronic endometritis require hospitalization complemented with informational radiowave therapy twice a day, then continue with one therapeutic session a day. In chronic stage the monotherapy of informational radiowave method is recommended once daily.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **16-1**(ST-36), **16-4**(LR-3), **7-8**(CV-3), **7-7**(ST-28), **7-2**(ST-25), **7-1**(GB-26), **9-2**(GV-4), **7-11**(SP-12).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat the treatment course in 2 weeks during 2 months.

11.17.2. Salpingitis

Salpingitis is inflammation of ovaries or ovarian tubes. There are acute and chronic salpingitis. The symptoms of acute salpingitis include fever, malaise, severe lower abdominal pain irradiating into low back, legs. Chronic salpingitis is often result of untreated acute salpingitis. The symptoms are dull, aching lower abdominal pain and perineum, in sacral area, dysmenorrhea.

Acute salpingitis and exacerbations of chronic salpingitis require hospitalization complemented with informational radiowave therapy twice a day, then continue with one therapeutic session a day. It is necessary to combine the informational radiowave therapy with pharmacologic agents.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **16-1**(ST-36), **10-5**(LI-11), **16-4**(LR-3), **7-8**(CV-3), **7-11**(LU-12), **9-7**(BL-31), **7-5**(KI-14), **9-2**(GV-4).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat the treatment course in 2 weeks during 2 months.

11.18. Endometriosis

Aberrant growth of endometrium outside the uterus, particularly in the dependent parts of the pelvis and in the ovaries, is a common cause of abnormal bleeding and secondary dysmenorrhea. This condition is known as endometriosis. Its causes, pathogenesis, and natural course are poorly understood. Depending on the location and extent of the endometrial implants, infertility, dyspareunia, or rectal pain with bleeding may result. Aching pain tends to be constant, beginning 2-7 days before the onset of menses, and becomes increasingly severe until flow slackens.

The goal of medical treatment is to preserve the fertility of women wanting future pregnancies, ameliorate symptoms, and simplify future surgery or make it unnecessary.

The informational radiowave therapy is applied in combination with nonsurgical methods of treatment or as the monotherapy depending upon the severity of the manifestations. It allows to arrest the pathologic process and relieves the pain.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **8-1**(GV-14), **4-3**(TE-20), **18-1**(GV-1), **9-9**(GV-2), **15-1**(SP-6), **7-10**(ST-30), **17-1**(LR-11), **7-1**(GB-26), **15-4**(KI-6).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat the treatment course every month during 4-6 months.

11.19. Dysmenorrhea

1.Primary dysmenorrhea. Primary dysmenorrhea is menstrual pain associated with ovular cycles in the absence of pathologic findings. The pain usually begins within 1-2 years after the menarche and may become more severe with time. The frequency of cases increases up to age 20 and then decreases with age and markedly with parity. Fifty to 75 percent of women are affected at some time, and 5-6% have incapacitating pain. Primary dysmenorrhea is low, midline, wave-like, cramping pelvic pain often radiating to the back or inner thighs. Cramps may last for 1 or more days and may be associated with nausea, diarrhea, headache, and flushing. The pain is produced by uterine vasoconstriction, anoxia, and sustained contractions mediated by prostaglandins.

2.Secondary dysmenorrhea. Secondary dysmenorrhea is menstrual pain for which an organic cause exists. It usually begins well after menarche, sometimes even as late as the third or fourth decade of life. The history and physical examination commonly suggest endometriosis or pelvic inflammatory disease. Other causes may be submucous myoma, IUD use, cervical stenosis with obstruction and etc.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **4-3**(TE-20), **9-3**(BL-23), **9-7**(BL-31) *right and left sides*, **13-3**(BL-60), **15-1**(SP-6), **3-6**(GB-20), **16-4**(LR-3), **17-1**(LR-11), **9-9**(GV-2), **18-2**(CV-1), **15-5**(KI-2), **15-4**(KI-6), **10-5**(LI-11), **7-2**(ST-25).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat 5 treatment course every month during 4 months.

11.20. Premenstrual syndrome

Premenstrual syndrome is a recurrent, variable cluster of troublesome physical and emotional symptoms that develop during the 7-14 days before the onset of menses and subside when menstruation occurs. The syndrome intermittently affects about one-third of all premenopausal women, primarily those 25-40 years of age. Although not every woman experiences all the symptoms or signs at one time, many describe bloating, breast pain, ankle swelling, a sense of increased weight, skin disorders, irritability, aggressiveness, depression, inability to concentrate, libido change, lethargy and food cravings.

The pathogenesis of premenstrual syndrome is still uncertain. Psychosocial factors may play a role. Current treatment methods are mainly empiric.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **3-6**(GB-20), **4-3**(TE-20), **11-7**(TE-1), **8-1**(GV-14), **15-1**(SP-6), **12-4**(PC-6), **7-6**(CV-4).

Extra points

For psychoemotional disorders: 12-6(LU-9), *11-6*(HT-9), *7-6*(CV-4);

For headache and periorbital pain: 3-4(GV-17), *4-4*(TE-19), *1-5*(TE-23), *3-7*(BL-10), *18-3*(LR-8);

For breast swelling: 5-9(ST-17);

For bloating: 7-2(ST-25), *7-3*(CV-8);

For low back pain and low abdominal pain: 9-2(GV-4), *7-10*(ST-30), *9-7*(BL-31).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course should start from 18th day of menstrual cycle. The duration of the treatment is 7 days. It is recommended to repeat the treatment course 3 times.

11.21. Menopausal syndrome

The term “menopause” denotes the final cessation of menstruation, either as a normal part of aging or as the result of surgical removal of both ovaries. In broader sense, as the term is commonly used, it denotes a 1- to 3-year period during which a woman adjusts to a diminishing and then absent menstrual flow and the physiologic changes that may be associated – hot flashes, night sweats, and vaginal dryness or soreness with coitus.

The average age at menopause today is 51 years. Premature menopause is defined as ovarian failure and menstrual cessation before age 40; this often has a genetic or autoimmune basis.

Symptoms and signs include cessation of menstruation, hot flushes, vaginal atrophy, osteoporosis.

The applying of informational radiowave therapy may recover functional disorders of higher nervous activity and vegetative system.

The informational radiowave therapy may be applied in stages of climacteric neurosis and is very effective.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **4-3**(TE-20), **3-6**(GB-20), **15-1**(SP-6), **12-4**(PC-6), **16-1**(ST-36);

Extra points

For dizziness: 8-2(BL-11), *13-6*(BL-65), *16-4*(LR-3), *15-8*(KI-1);

For sleep disorders and general weakness: 8-6(BL-43), *13-2*(GB-39), *7-8*(CV-3);

For vomiting: 6-6(CV-12), *6-8*(LR-13), *11-4*(LI-4);

For low back pain and sacral pain: 9-3(BL-23), *9-7*(BL-31), *9-9*(GV-2), *13-3*(BL-60);

For breast pain: 5-8(PC-1), *5-2*(KI-27);

For swelling of uterine and genitalia: 16-6(LR-1).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10-12 days. It is recommended to repeat the 7days treatment course every 3 weeks during 4 months.

11.22. Postmenopausal vaginal bleeding

Vaginal bleeding that occurs 6 months or more following cessation of menstrual function should be investigated. The most common causes are atrophic endometrium, endometrial proliferation, hyperplasia, endometrial or cervical cancer, and administration of estrogens without added progestin. Other causes include atrophic vaginitis, trauma, endometrial polyps, trophic ulcers of the cervix associated with prolapse of the uterus, and blood dyscrasias. Uterine bleeding is usually painless, but pain will be present if the cervix is stenotic, if bleeding is severe and rapid, or infection or torsion or extrusion of a tumor is present. The patient may report a single episode of spotting or profuse bleeding for days or months.

The treatment is complex. The informational radiowave method has nonspecific action. The informational radiowave therapy may normalize or improve functions of organs and systems involved in pathologic process.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **8-1**(GV-14), **4-3**(TE-20), **18-1**(GV-1), **9-9**(GV-2), **15-1**(SP-6), **7-10**(ST-30), **17-1**(LR-11), **7-1**(GB-26), **15-4**(KI-6).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The duration of the treatment is 10 days. It is recommended to repeat the treatment course every month during 4-6 months.

11.23. Myoma

Uterine myomas are the most common benign neoplasm of the female genital tract. It is a discrete, round, firm, often multiple uterine tumor composed of smooth muscle and connective tissue. Myomas are frequently asymptomatic. However, they can cause urinary frequency, dysmenorrhea, heavy bleeding (often with anemia), or other complications due to the presence of an abdominal mass. If myoma is large the symptoms due to pressure on neighboring organs are present.

The informational radiowave therapy effects on pathogenic factors and suppresses further growth.

The informational radiowave therapy may be applied in combination with other curative methods or as monotherapy; in pre- and postoperative care for the prevention and the treatment of complications.

All patients with myoma should undergo regular prophylactic medical examination at gynecologist.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **8-1**(GV-14), **4-3**(TE-20), **7-8**(CV-3), **9-9** (GV-2), **15-1**(SP-6), **7-10**(ST-30), **18-3**(LR-8).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat the treatment course every month during 6 months.

11.24. Mammary dysplasia (Fibrocystic disease)

This disorder, also known as fibrocystic disease or chronic cystic mastitis, is the most frequent lesion of the breast. It is common in women 30-50 years of age but rare in postmenopausal women who are not taking hormonal replacement medications; this suggests that it is related to ovarian activity. Estrogen hormone is considered a causative factor.

Mammary dysplasia may produce an asymptomatic lump in the breast that is discovered by accident, but pain or tenderness often calls attention to the mass. There may be discharge from the nipple. Fluctuation in size and rapid appearance or disappearance of a breast mass are common in cystic disease. Informational radiowave therapy may eliminate disorders in the informational structures of hypothalamus-hypophysis-ovary system functioning by principle of feedback. The informational radiowave method is applied to prevent and treat the mammary dysplasia. The informational radiowave therapy may be complemented with other methods including surgical. In that case informational radiowave therapy is applied for pre- and postoperative care. It is known from the practical experience that informational radiowave therapy shortens the rehabilitation period after surgery.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **3-6**(GB-20), **8-3**(GB-21), **2-6**(ST-10), **5-9**(ST-17), **11-4**(LI-4), **8-1**(GV-14), **5-5**(CV-17), **15-1**(SP-6), **6-8**(LR-13), **5-7**(KI-23).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each recommended zone and locally on breast induration area for 10 minutes. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat the treatment course every month during 4 months.

11.25. Infertility

A couple is said to be infertile if pregnancy does not result after 1 year of normal sexual activity without contraceptives. About 25% of couples experience infertility at some point in their reproductive lives; the incidence of infertility increases with age. The male partner contributes to about 40% of cases of infertility, and a combination of factors is common.

Fertility may be restored by appropriate treatment in many patients with endocrine imbalance, particularly with hypo- or hyperthyroidism. Antibiotic treatment of cervicitis is of value.

The treatment is complex and depends on the localization and character of pathologic process.

Informational radiowave therapy may normalize or improve the functions of organs and systems involved into pathologic process owing to its nonspecific action. The applying of informational radiowave therapy is effective when both partners are treated timely.

Recommended zones for electromagnetic exposure: 3-1(GV-20), **4-3**(TE-20), **16-1**(ST-36), **15-1**(SP-6), **7-8**(CV-3), **15-5**(KI-2), **15-4**(KI-6), **9-7**(BL-31), **17-1**(LR-11), **7-6**(CV-4), **7-7**(ST-28), **7-10**(ST-30).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat the treatment course every month during 4-6 months.

11.26. Frigidity

Frigidity is a complex condition in which there is a general lack of sexual responsiveness. The woman has difficulty in experiencing erotic sensation and does not have the vasocongestive response. Sexual activity varies from active avoidance of sex to an occasional orgasm. Orgasmic dysfunction – in which a woman has a vasocongestive response but varying degrees of difficulty in reaching orgasm – is sometimes differentiated from frigidity. Causes for the dysfunctions include poor sexual techniques,

early traumatic sexual experiences, interpersonal disharmony (marital struggles, use of sex as a means of control), and intrapsychic problems (anxiety, fear, guilt). Organic causes include any conditions that might cause pain in intercourse, pelvic pathology, mechanical obstruction, and neurologic deficits. Reproductive function is intact.

The applying of informational radiowave therapy is effective when both partners are treated timely.

Recommended zones for electromagnetic exposure: 7-4(CV-6), 9-11(BL-36), 7-10(ST-30), 9-2(GV-4), 15-1(SP-6), 3-1(GV-20), 4-3(TE-20), 12-9(HT-7), 17-1(LR-11).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones for electromagnetic exposure during the treatment course. The treatment course is 10 days. It is recommended to repeat the 7days treatment course every 3 weeks during 4 months.

Chapter 12. Pregnancy & Postnatal Care

12.1. Vomiting of pregnancy (Morning Sickness) & hyperemesis gravidarum

(Pernicious Vomiting of Pregnancy)

Morning or evening nausea and vomiting usually begin soon after the first missed period and cease after the fourth to fifth months of gestation. At least half of women, most of them primiparas, complain of nausea and vomiting during early pregnancy. The cause of vomiting during pregnancy is believed to high estrogen levels.

Persistent, severe vomiting during pregnancy – hyperemesis gravidarum – can be disabling and require hospitalization. Dehydration, acidosis, and nutritional deficiencies may develop with protracted vomiting.

Reassurance and dietary advice are all that is required in most instances.

Recommended zones for electromagnetic exposure: 4-3(TE-20), **3-6**(GB-20), **5-5**(CV-17), **6-6**(CV-12), **3-1**(GV-20), **15-1**(SP-6).

Use all the recommended zones for each therapeutic session. Expose 5 minutes each zone. The duration of the treatment course is 7-10 days.

12.2. Hypersalivation (drooling) in pregnancy

Hypersalivation is often accompanied by vomiting of pregnancy. It may be independent symptom of gestational toxicosis. Rinsing with 1% solution of menthol (salvia tinctures or camomile tincture) may alleviate condition of patients.

Recommended zones for electromagnetic exposure: 4-5(SI-19), **12-6**(LU-9), **2-5**(LI-18), **2-4**(CV-23), **4-9**(ST-6).

Use all the recommended zones for each therapeutic session. Expose 5 minutes each zone. The duration of the treatment course is 7-8 days.

12.3. Dermatoses of pregnancy

Urticaria, exanthema, erythema may occur in early pregnancy and it may be accompanied with persistent itching which may bring on to the disturbance of sleep, fatigue and irritability. Informational radiowave therapy can be applied alone without using antihistaminic agents.

Recommended zones for electromagnetic exposure: 10-5(LI-11), **16-5**(LR-2), **15-8**(KI-1), **5-5**(CV-17), **14-1**(BL-40), **12-5**(LU-7).

Use all the recommended zones for each therapeutic session. Expose 5 minutes each zone. The duration of the treatment course is 10 days.

12.4. Jaundice of pregnancy

It is benign cholestatic jaundice of unknown cause. It usually occurs in the third trimester of pregnancy. Itching, gastrointestinal symptoms, and abnormal liver excretory function tests may be present. Cholestasis is noted on liver biopsy. The nature of the defect is cholestasis of uncertain pathogenesis, often on familial basis. Prognosis is excellent, but recurrence may develop with subsequent pregnancies.

Recommended zones for electromagnetic exposure: 16-5(LR-2), **6-8**(LR-13), **13-5**(GB-40), **12-10**(PC-7).

Use all the recommended zones for each therapeutic session. Expose 5 minutes each zone. The therapy is long-term. The treatment should be continued until complete disappearance of the symptoms. First two weeks therapeutic session should be held every day, later once in a day.

12.5. Gestational edema

Occurrence of a generalized and excessive accumulation of fluid in the tissue or increase in weight of 5 pounds or more in 1 week. The edema may involve the upper extremities and face rather than just the lower extremities. Classically, the presence of all three elements (hypertension, proteinuria and edema) is required for the diagnosis of preeclampsia-eclampsia. The absence of one or two components does not exclude the diagnosis of preeclampsia-eclampsia. Diagnosis at an early stage thus requires careful attention to details and a high index of suspicion.

Recommended zones for electromagnetic exposure: 15-8(KI-1), ***14-1***(BL-40), ***12-3***(HT-3), ***5-5***(CV-17), ***15-1***(SP-6).

Use all the recommended zones for each therapeutic session. Expose 5 minutes each zone. It is recommended to hold sixth days treatment course with break in a week until labor occurs.

12.6. Nephropathy of pregnancy

It is characterized by triad of the symptoms: edema, hypertension and proteinuria. Mild nephropathy could be managed with informational radiowave therapy, severe form of nephropathy require hospitalization and intensive care.

Recommended zones for electromagnetic exposure: 15-8(KI-1), ***14-1***(BL-40), ***12-10***(PC-7), ***8-3***(GB-21), ***3-1***(GV-20).

Use all the recommended zones for each therapeutic session. Expose 5 minutes each zone. It is recommended to hold sixth days treatment course with break in a week until labor occurs.

12.7. Back pain during pregnancy

During pregnancy and in the first year after delivery mothers often complain of back pain. It is caused by the changes of carriage occurring for the short time.

Recommended zones for electromagnetic exposure:

For low back pain: 18-1(GV-1), ***9-9***(GV-2), ***9-2***(GV-4).

For back pain in thoracic part of spinal cord: 3-5(GV-16), ***3-4***(GV-17), ***8-1***(GV-14).

Use all the recommended zones for each therapeutic session and locally. Expose 5 minutes each zone. The duration of the treatment course is depends on the results of the treatment.

12.8. Herpes gestationis

Herpes gestationis occurs in about one in 50,000-60,000 pregnancies. The bullae often appear first in periumbilical distribution, and there may be erythematous papules and plaques, vesicles, and large

bullae. It usually begins in the fifth or sixth month of pregnancy, or the onset may be delayed to postpartum period.

Recommended zones for electromagnetic exposure: 10-5(LI-11), **11-4**(LI-4), **12-10**(PC-7), **15-2**(KI-7), **16-1**(ST-36), **16-5**(LR-2).

Use all the recommended zones for each treatment session. Expose 5 minutes for each zone and locally on the affected area of skin and mucous membranes. The duration of the treatment is 5-7 days.

12.9. Postnatal care

The following methodic provides the quick recovery after delivery.

Recommended zones for electromagnetic exposure:

To increase uterine contraction after delivery: 7-8(CV-3), *7-3*(CV-8), *15-1*(SP-6), *13-6*(BL-65), *4-3*(TE-20).

Use all the recommended zones for uterine contraction. Expose 7 minutes each zone. On the first 3 days after delivery the therapeutic session should hold twice daily. The duration of treatment is 7 days.

To decrease postpartum bleeding: 15-4(KI-6), *14-1*(BL-40), *15-8*(KI-1), *15-2*(KI-7).

Use all the recommended zones for postpartum bleeding. Expose 7 minutes each zone. On the first 3 days after delivery the therapeutic session should hold twice daily. The duration of treatment is 7 days.

For quick health resumption: 11-4(LI-4), *16-1*(ST-36), *15-1*(SP-6), *12-9*(HT-7), *3-6*(GB-20).

Use all the recommended zones for health resumption. Expose 7 minutes each zone. On the first 3 days after delivery the therapeutic session should hold twice daily. The duration of treatment is 7 days.

To increase lactation: 5-9(ST-17) *both sides*, *5-4*(LU-2) *both sides*, *5-8*(PC-1) *both sides*, *4-3*(TE-20), *16-4*(LR-3).

Use all the recommended zones for increasing lactation. Expose 5 minutes each zone. On the first 5 days after delivery the therapeutic session should hold twice daily. The duration of treatment is 10 days. Women with cesarean section and other surgery in labor should apply locally on the suture after operation for 10-15 minutes during 1 week.

12.10. Fissure of nipple (nipple crack)

It is the most common problem of postnatal period. The causes are various: irregular breast-feeding, using breast pump on the first days after labor, breast-feeding over 40 minutes. The feeding becomes very painful. There are nipple swelling and one or two crackles on it.

The treatment is long-term and needs patient to be patient. The woman should continue breast-feeding in spite of pain. The breast needs expressions of all remain milk after feeding. After feeding the nipple should not be washed. Saliva and breast milk contain disinfecting agents. Hold the apparatus above the nipple for 7-10 minutes. Apply antibiotic ointments. On the first days hold the treatment session after each breast feeding and then 2-3 times daily. The treatment should continue until complete healing.

12.11. Breast feeding

Breast feeding should be encouraged throughout pregnancy and the puerperium. Mothers should be told the benefits of breast feeding – it is emotionally satisfying, promotes mother-infant bonding and gives significant immunity to the infant. Transfer of immunoglobulins in colostrum and breast milk protects the infant against many systemic and enteric infections. Macrophages and lymphocytes transferred to the infant from breast milk play an immunoprotective role. The intestinal flora of breast-fed infants inhibits the growth of pathogens. Breast-fed infants have fewer bacterial and viral infections, less severe diarrhea, fewer allergy problems, and less subsequent obesity than bottle-fed infants. Frequent breast feeding on an infant demand schedule enhances milk flow and successful breast feeding. Milk supply can be increased by increased suckling and increased rest.

Recommended zones for electromagnetic exposure:

For increase milk supply: 3-1(GV-20), 4-3(TE-20), 5-4(LU-2) both sides, 10-6(LI-10), 16-5(LR-2).

Use all the recommended zones for each therapeutic session. Expose 5 minutes each zone. The duration of the treatment course is 10 days.

When woman complains of galactostasis she should be advised to express all the breast milk. Expose the recommended zones for electromagnetic exposure twice daily for 10 minutes. Hold the apparatus above painful breast induration.

12.12. Puerperal mastitis

Postpartum mastitis occurs sporadically in nursing mothers shortly after they return home, or it may occur in epidemic form in the hospital. *Staphylococcus aureus* is usually the causative agent. Inflammation is generally unilateral, and women nursing for the first time are more often affected. Mastitis frequently begins within 3 months after delivery and may start with a sore or fissured nipple. There is obvious cellulitis in an area of breast tissue, with redness, tenderness, local warmth, and fever. Informational radiowave therapy can prevent suppuration without antibiotic therapy on early stages. The therapeutic session should perform 3-4 times daily.

Treatment consists of antibiotics effective against penicillin-resistant staphylococci and regular emptying of the breast by nursing followed by expression of any remaining milk by hand or with a mechanical suction device.

Prevention consists of frequent breast feeding on an infant demand to 20 times daily without expression breast milk.

Recommended zones for electromagnetic exposure: 5-3(CV-20), 5-5(CV-17), 5-6(ST-16), 5-7(KI-23), 5-8(PC-1), 5-9(ST-17), 8-3(GB-21), 10-6(LI-10), 11-5(SI-2), 15-7(SP-1), 16-4(LR-3).

Use 5-6 zones every day for one therapeutic session. Attach for 5 minutes each zones, and also locally on induration zone for 10 minutes. Use all the recommended zones taking its turns during the treatment. The duration of treatment is 10 days. On the first and second days hold therapeutic session 2-3 times daily.

12.13. Striae gravidarum

Slowly move the radiator of the apparatus above affected skin involving normal skin 10-15 minutes. The duration of treatment is 10-15 days. It is recommended to repeat 6 days therapy with break in 2 weeks during 3 months.

Chapter 13. Informational radiowave therapy in pediatrics

The treatment with apparatus MINITAG® of children shows a good results. In this chapter the diseases are described which don't need special or hospital care.

13.1. Acute viral respiratory infection in newborn children

It is the most common form of respiratory ailments of infants because of not just constant virus circulations in the air but also due to specific immunity of the children of this age group. Maternal antiviral antibody survives in peripheral blood of infants only in the first days of the life. Actively synthesized specific antibody circulates 1-2 weeks. Local [tissue] immunity provided by local antibodies is weak in infants.

13.1.2. Influenza A

It is characterized by severe clinical manifestations in infants. The onset is usually abrupt with fever, malaise, and dyssomnia. The child is irritable. His sucking activity diminishes. Upper respiratory tract involvement manifests by mucous and mucopurulent discharges. It is associated with cough. The duration influenza type A is 6 to 23 days depending on severity of the symptoms.

13.1.3. Influenza B

It usually infects infants rare. Influenza serologic type B is characterized by severe clinical course. The onset is sudden. It is manifested by significant intoxication, restlessness, possible convulsion, and hepatomegaly. The symptoms of upper respiratory tract inflammation usually develop on 2-3 days from the first day of disease and sometimes accompanied by asthmatic attacks. The duration of influenza type B usually 7-21 days and depends on severity of the symptoms.

13.1.4. Parainfluenza

It is infectious disease in infants characterized by severe catarrhal symptoms of the upper respiratory tract and mild symptoms of intoxication. There is usually no fever. It starts from watery rhinorrhea which becomes mucopurulent later. It is characterized by productive cough. The cough and profuse rhinorrhea produce food regurgitation and vomiting.

13.1.5. Adenovirus infections

These infections are clinically inapparent and most common among infants. It may start suddenly with severe malaise, catarrhal symptoms in upper respiratory tract and intestinal symptoms.

Recommended zones for electromagnetic exposure: 8-1(GV-14), **3-1**(GV-20), **16-5**(LR-2), **15-8**(KI-1), **11-4**(LI-4), **1-9**(ST-2) left and right side.

Use all the recommended zones for electromagnetic exposure. Attach 3 minutes for each zone. The treatment course is 7-10 days. It is recommended to do therapeutic sessions twice daily first two days. Patients are recommended to apply mustard plasters on the chest and soles, drop breast milk into each nostril. It contains interferon.

13.2. Dyspeptic disorders in infants

Functional immaturity of gastro-intestinal tract, imperfection of central regulation of its function and high frequency of dysbacteriosis make it more vulnerable for these disorders. Dyspeptic and dyskinetic disorders accompany main disease (pneumonia, otitis media, acute respiratory disease). Parenteral diarrhea may be main syndrome in severe forms of dysbacteriosis, malabsorption syndrome, congenital metabolic disorders (disaccharides intolerance, and other food intolerance).

Dyspepsia starts from refusal to eat, flabbiness, and diarrhea. Bloating, flatus, and cramps accompany the diarrhea. The stool is yellowish color, watery and may be frothy. It may be blood-streaked and with foul smelling. In severe cases exicosis and toxicosis may develop.

The treatment of dyspeptic disorders should be directed primarily at finding and correcting the underlying cause, reduction the quantity of breast-feeding on 30-50% for each meal, adding more fluid, repeal of supplementary feeding. Patient should be hospitalized in severe complicated cases.

Recommended zones for electromagnetic exposure: 6-5(GB-24), **7-3**(CV-8), **11-1**(TE-6), **15-8**(KI-1), **16-4**(LR-3).

Use all the recommended zones for each session daily. The duration one therapeutic episode is 3 minutes for each area. The therapeutic course is 3-5 days. It is recommended do sessions twice daily first two days.

13.3. Infantile colic

It is the most common symptom of young infants characterized by paroxysms of gastrointestinal pain, with severe crying and irritability, due to a variety of causes, such as dysbacteriosis, imperfection of enzymes, swallowing of air, emotional upset, or overfeeding.

Recommended zones for electromagnetic exposure: 7-3(CV-8), **7-6**(CV-4), **16-5**(LR-2), **7-2**(ST-25) *left side*, **15-7**(SP-1).

Use all the recommended zones for each session. Attach for 3 minutes each area. One to 10 sessions are prescribed depending on the condition being treated and the response to treatment.

13.4. Infantile hernia

A hernia is a protrusion of the contents of a body compartment through the wall normally encloses. Hernias or “ruptures” are the most common significant anomalies of children. The most common hernia of the groin in infancy and childhood is the indirect (congenital, infantile) inguinal hernia. Femoral and direct inguinal hernias are rare in children. Inguinal hernia most commonly occurs in newborn boys especially in preterm infants. Patient needs the surgeon consultation to exclude possible entrapment of the hernia.

Umbilical and midline (epigastric) hernias trap rarely and have tendency to disappear spontaneously in several years.

Informational radiowave therapy shortens the time of the closure of the hernia.

Recommended zones for electromagnetic exposure: *attach to hernial ring with paraumbilical area for 10 minutes. The duration of therapeutic course is 7-12 session in a day.*

13.5. Congenital dysplasia of the Hip

(Congenital hip dislocation, developmental dysplasia of the hip)

This lesion results from abnormal development of 1 or all of the components of the hip joint: the acetabulum, the femoral head, and the surrounding capsula and soft tissues.

The etiology of congenital dysplasia of the hip is clearly multifactorial. There are genetic factors. Girls are more commonly affected than boys. It may be associated with other abnormalities such as clubfeet and arthrogryposis or with a breech delivery, in which case uterine position or the trauma of delivery may be important factors.

It can uni- and bilateral. Extra skin folds may be seen on the medial aspect of 1 thigh suggest that the femur has been dislocated proximally. The child should be positioned supine on a firm surface. The hips and knees are flexed to 90% with the hips abducted 45%. The hip to be examined is grasped with the examiners thumb in the groin and the long finger on greater trochanter. The first part of examination consists of bringing the knee toward the midline, adducting the hip, as the examiner's thumb pushes gently posteriorly and laterally on the inner side of the thigh in an attempt to whether the femoral head can be pushed backward out of the acetabulum. This is Barlow provocative test for dislocatability. The second part of the evaluation consists of abducting the hip by pushing the knee outward. While the examiner's long finger lifts forward on the greater trochanter. This is Ortolani test. If a click is felt as the femoral head slips over the back edge of the socket into the acetabulum during the Ortolani test, this is presumptive evidence that the hip was dislocated. Ultrasonography is extremely useful in early infancy, both for initial diagnosis and for following the response of a dysplastic hip to treatment. Dynamic splinting in a position of stability is the standard treatment of the idiopathic dysplastic or dislocated hip in the newborn period.

The Pavlic harness is the splinting method of choice for the newborn with a frank dislocation. More dysplastic hips may require more significant intervention in the form of traction, cast immobilization, or surgery. Orthopedic follow-up of every dislocated or dysplastic hip should continue through skeletal maturity. Informational radiowave therapy reduces the time of immobilization.

Recommended zones for electromagnetic exposure: 9-10(GB-30) right and left side, 17-1(LR-11) right and left side, 14-1(BL-40).

Use all the recommended zones for one therapeutic session. Expose for 3 minutes for each zone. The duration of treatment course is 10 days. Repeat 5 days treatment course in 2 weeks during 3 months.

13.6. Intestinal dysbacteriosis

It is disorder of microbiocenosis of the intestine. It may appear in oral cavity, mucous membranes and skin. Intestinal dysbacteriosis has the most significant importance in infants. From the first moments of life after birth the organism of infants' starts to inhabit with multiple microorganisms – so-called colonization occurs and microecology system forms. Initially the organism of the baby colonizes with the maternal flora; on the first 5-8 days of life his/her own biocenosis forms. If the child is on the breast feeding from 8th day of his/her life protective flora is dominated. It includes Bifidobacterium and Lactobacillus. If child is on artificial or mixed feeding the percentage of Bifidobacteriae decreases, Escherichia coli, enterococcus, fungus are dominated.

The causes of intestinal dysbacteriosis may be various. Its could be complicated pregnancy and delivery, early mixed or artificial feeding, late onset of breastfeeding, antibiotic therapy, alimentary allergy, perinatal disease of central nervous system.

According to the classification of intestinal dysbacteriosis there are 4 stages.

First stage is without clinical symptoms. Mild dyspepsia like on improper feeding may occur.

Recommended zones for electromagnetic exposure: 7-2(ST-25), 7-3(CV-8), 16-4(LR-3).

Use all the recommended zones for one therapeutic session. Expose 5 minutes each zone. The duration of the treatment is 3 days.

Second stage manifests significant deficiency of bifidobacterium, prevalence of the colibacillus and presence of pathogenic flora and fungus infection.

Recommended zones for electromagnetic exposure: 7-2(ST-25), 7-3(CV-8), 9-6(BL-25).

Use all the recommended zones for one therapeutic session. Expose 5 minutes each zone. The duration of the treatment is 7days. It is necessary to take probiotics ("Lactobacterin", "Bificol", "Bifiliz",

“Bifidum”, and also bacterial agents recognized as parapharmaceutics: “Narinae”, “Narinae-vital”, “Vitaflor” and other lactopreparations).

Third stage characterizes by high percentage of aerobic flora, their toxicity on children’s organism. This stage occurs in severe inflammatory infections and intensive antibiotic therapy.

Recommended zones for electromagnetic exposure: 6-5(GB-24), **7-3**(CV-8), **10-6**(LI-10), **15-7**(SP-1), **16-5**(LR-2), **18-4**(SP-9).

Use all the recommended zones for one therapeutic session. Expose 3 minutes each zone. The duration of the treatment is 10 days. It is advised to repeat 5 days treatment course with breaks in 2 weeks during 3 monthes. It is necessary to take probiotics (“Lactobacterin”, “Bificol”, “Bifiliz”, “Bifidum”, and also bacterial agents recognized as parapharmaceutics: “Narinae”, “Narinae-vital”, “Vitaflor” and other lactopreparations).

Fourth stage characterizes by accumulating endotoxins. It manifests by the persistent diarrhea, deterioration of the general status, weight loss. This stage may be seen in severe forms of sepsis complicated by enterocolitis due to long using of antibiotics or congenital enzymopathy.

This stage requires hospitalization and intensive care.

Severe forms of dysbacteriosis require selective treatment with phages which have directional activity against these bacteria. Bacteriophages find correctly and destroy only those bacteria, against which their action is directed, not affecting the normal microflora of the organism. They are vitamin metabolites such as B₆, B₅, B₁₅, B₁, B₂.

The treatment is long-term. It is recommended to use the treatment plan of the third stage.

13.7. Rickets

Inadequate mineralization of osteoid tissue in the growing organism. In type I rickets there is a deficiency of 1.25-dihydroxy-vitamin D₃ (1.25-(OH)₂ which may result from a variety of causes.

In type II rickets the primary problem appears to be phosphate deficiency, which usually results from failure of normal resorption of phosphate by the renal tubule. The clinical syndrome of rickets include craniotabes, genu valgum, and rib cage rosary. This deficiency of mineralization seen in growing bones and resulting in bony deformities may be caused by a number of conditions including: vitamin D deficiency, prematurity, defects in hydroxylation of vitamin D, and organ resistance to 1.25-dihydroxyvitamin D and hypophosphatemia.

Vitamin D supplementation and/or high-mineral formulae will usually heal the rickets.

Recommended zones for electromagnetic exposure:

First day - 3-6(GB-20), *7-6*(CV-4), *18-3*(LR-8) *left and right sides,*

Second day - 13-1(GB-34) *left and right sides, 5-5*(CV-17), *16-4*(LR-3)

Use all the recommended zones daily. Expose for 3 minutes for each zone. Take turns zones of exposure for first and second days during the treatment course. The duration of treatment is 7days of each months during 3 months.

13.8. Omphalitis

Omphalitis is an infection of the tissue adjacent to the umbilical cord. It may extend into the blood stream. Omphalitis occurs in about 2% of infants delivered in modern hospitals on the first day of life. Almost all cords are sterile but they are gradually become colonized with *S.aureus*, *S.epidermidis*, or *streptococci*.

Serous, seroangious or purulent secretions from the cord base after separation are common. If the surrounding skin is inflamed or if the secretions are flankly purulent local application of antibiotic

ointments is indicated. Significant periumbilical infection or any incidence of systemic infection requires administration of systemic antibiotic, orally or intravenously under pediatrician observation.

Recommended zones for electromagnetic exposure: 3-6(GB-20), 16-4(LR-3), 16-1(ST-36), 7-4(CV-6).

Use all the recommended zones every day. Expose for 3 minutes for each zone and locally for periumbilical area for 7 minutes. The treatment course is 7-10 days.

13.9. Anal fissure

A small crack or slit at the mucocutaneous line is a common acquired lesion in infancy. The cause is often not evident but may be trauma secondary to overzealous cleaning, constipation with passage of large hard stool, scratching induced by irritation from *Enterobius vermicularis* or eczema, or other perianal conditions.

Pain on defecation and, frequently refusal to defecate are the principal manifestations.

Most fissures will heal spontaneously if local irritation is lessened or eliminated.

The administration of laxatives to keep the stool fluid affords only temporary relief.

Recommended zones for electromagnetic exposure: 18-1(GV-1), 18-2(CV-1).

Use all the recommended zones for each session. Expose for 5 minutes for each zone and locally for anal area for 7 minutes. The treatment course is 7 days.

13.10. Cerebral paralysis (Little Disease)

Any nonprogressive central motor deficit dating to events in the prenatal or perinatal periods. It is not a specific disease but a group of disorders of varied cause. The relationship of cerebral palsy to neonatal anoxia was first established by Little.

The most likely etiologic event in these infants is cerebral anoxia, often complicated by intraventricular and subependymal hemorrhages; mechanical trauma to the brain at birth, congenital malformations of brain, and cerebral vascular occlusions during fetal life, kernicterus.

Clinical classification of patients with cerebral palsy is based on the nature of the observed motor deficit.

The following classification is useful:

- (1) Spastic cerebral palsy (quadriplegia, paraplegia, hemiplegia, monoplegia,);
- (2) Extrapyramidal cerebral palsy (choreoathetosis, dystonia);
- (3) Atonic cerebral palsy (atonic diplegia, congenital cerebellar ataxia);
- (4) Mixed types.

Treatment consists of early application of stretching exercises to prevent contractures, orthopedic appliances and surgical procedures to improve mobility, and special education techniques to compensate for motor and intellectual defects in combination with informational radiowave therapy. The best results have been seen with mild and moderate forms of diseases. Informational radiowave therapy improves the general condition, emotional, orthopedic and neurologic state of the patients. The children become more active, their exercise and mental performance increase. Sleep and appetite become better.

Recommended zones for electromagnetic exposure: 3-1(GV-20), 8-1(GV-14), 10-5(LI-11), 11-4(LI-4), 16-1(ST-36).

Extra points:

Diplegia with low extremities involvement: 9-10(GB-30), 9-11(BL-36), 13-2(GB-39), 13-3(BL-60), 15-1(SP-6), 15-6(SP-4), 16-3(ST-41), 16-9(GB-43).

Hemiplegia: **11-5**(SI-2), **11-6**(HT-9), **12-6**(LU-9), **12-14**(PC-9), **13-7**(BL-67), **16-4**(LR-3), **16-9**(GB-43).
Hyperkinesia: **10-3**(TE-10), **10-4**(SI-8), **12-1**(LU-5), **12-5**(LU-7), **12-9**(HT-7), **12-10**(PC-7), **15-8**(KI-1),
16-5(LR-2).
Pronation of forearm: **11-2**(TE-5), **12-4**(PC-6).
Hypertonus of shoulder muscles: **10-3**(TE-10), **12-4**(PC-6), **12-10**(PC-7).
Arm and fingers muscle involvement: **10-4**(SI-8), **11-3**(TE-4), **12-2**(PC-3), **12-3**(HT-3).
Mental disorders: **3-5**(GV-16), **12-2**(PC-3), **12-7**(HT-5).
Speech disturbances: **2-1**(GV-26), **4-9**(ST-6), **4-10**(ST-5).
Hypersalivation: **2-4**(CV-23), **5-2**(KI-27), **13-3**(BL-60), **14-2**(KI-10).
Hyperkinesia of facial muscles: **1-7**(GB-1), **2-1**(GV-26), **3-2**(BL-7), **4-6**(GB-2).
Involvement of the muscle of the occipital and neck area: **3-7**(BL-10), **4-1**(GB-9), **4-7**(TE-17),
8-2(BL-11), **8-3**(GB-21), **10-2**(LI-15),
11-5(SI-2), **13-6**(BL-65).
Hemiparesis: **10-3**(TE-10), **11-2**(TE-5), **11-6**(HT-9), **12-1**(LU-5), **12-2**(PC-3), **12-3**(HT-3), **12-6**(LU-9),
12-14(PC-9), **15-2**(KI-7).
Movement disorders of joints: **4-3**(TE-20), **8-3**(GB-21), **8-6**(BL-43), **10-3**(TE-10).
Knee joint movement disorders: **9-11**(BL-36), **14-3**(BL-57), **18-3**(LR-8).
Ankle joint movement disorders: **13-4**(BL-62), **13-5**(GB-40), **15-1**(SP-6), **15-8**(KI-1), **16-3**(ST-41),
16-4(LR-3).

For one treatment session use 5-6 zones. Expose 3 minutes each zone. Change area of exposure during the treatment course. The treatment course is 10 days monthly. Repeat the course every month. The therapy is long.

13.11. Immunization

Routine immunization is a standard part of the well child care delivered by most physicians to protect the child from disease (diphtheria, poliomyelitis, tetanus, pertussis, measles, mumps). After immunization the child immunosuppression occurs during the following 3-4 weeks. The informational radiowave therapy should be directed to support the immune condition during that time. Fever should not last more than 24 hours; if fever is very high or does not resolve, parents should call pediatrician.

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **10-5**(LI-11), **11-4**(LI-4), **16-5**(LR-2).

Use all the recommended zones for one therapeutic session. Expose each zone for 3 minutes. The treatment course is 5 days.

13.12. Fever

Recommended zones for electromagnetic exposure: **8-1**(GV-14), **10-5**(LI-11), **11-4**(LI-4);

Extra points

For productive cough with rhinitis: **12-5**(LU-7), **16-2**(ST-40), **16-3**(ST-41), **2-4**(CV-23).

Use all the recommended zones for one therapeutic session daily. Expose 3 minutes for each area. The therapy consists of informational radiowave therapy 5 days.

13.13. Acute bronchitis

Though the diagnosis of “acute bronchitis” is frequently made, this condition may not exist in children as an isolated clinical entity. Rather, bronchitis occurs in association with a number of other conditions of upper and lower respiratory tracts, and the trachea is nearly always involved.

Acute bronchitis is usually preceded by a viral upper respiratory tract infection. Secondary bacterial infection with *S.pneumoniae* or *Hemophilus influenzae* may occur.

The child presents a frequent, dry, hacking, unproductive cough of relatively gradual onset, beginning 3-4 days after the appearance of rhinitis.

Recommended zones for electromagnetic exposure: 11-4(LI-4), **12-1**(LU-5), **12-6**(LU-9), **15-1**(SP-6),
16-7(ST-44), **5-5**(CV-17), **8-5**(BL-13)

Extra points

For allergic bronchitis with spasmodic cough: 8-1(GV-14), *10-5*(LI-11), *12-9*(HT-7), *16-1*(ST-36).

Use 5-6 zones for one therapeutic session. Expose for 3 minutes each zone. Take turns zones during the treatment course. The treatment course is 7-10 days.

13.14. Pertussis (Whooping Cough)

Pertussis is an acute respiratory infection that can affect any susceptible host but is most common and serious in young children. Pertussis means intensive cough.

Pertussis usually is caused by *Bordetella Pertussis* (*Hemophilus pertussis*). The incubation period for pertussis is 6-20 days. Symptomatic illness is generally divided into 3 stages: catarrhal, paroxysmal, and convalescent.

Treatment consists of the supportive care that includes avoidance of factors that provoke attacks of coughing and maintenance of hydration and nutrition.

Recommended zones for electromagnetic exposure: 5-3(CV-20), **8-1**(GV-14), **11-4**(LI-4), **12-1**(LU-5),
12-6(LU-9), **16-2**(ST-40).

Use all the recommended zones for one therapeutic session. Expose each area for 3 minutes. The treatment course is 3 weeks.

13.15. Bronchial asthma

The informational radiowave therapy should combine with pharmacologic agents and physical exercise.

Recommended zones for electromagnetic exposure: 5-4(LU-2), **8-2**(BL-11), **10-5**(LI-11), **11-4**(LI-4),
12-6(LU-9), **16-1**(ST-36);

Extra points

For allergy: 5-5(CV-17), *6-2*(CV-14), *8-5*(BL-13), *11-7*(TE-1), *16-2*(ST-40).

Use for one therapeutic session 4-5 recommended zones daily. Expose for 3 minutes each zone. Change zones during the treatment course. The treatment course is 10 days. It is recommended to take five days with break in 2 weeks during 3 months.

13.16. False [spasmodic] croup

Viral agents account for nearly all croup except that associated with diphtheria and acute epiglottitis. Spasmodic croup most often occurs in children 1-3 year of age and is clinically similar to acute laryngotracheobronchitis except that findings of infection. The etiology is viral in most instances but allergic and psychologic factors appear important in some cases. The anxious and excitable child is more prone to this syndrome and in some instances there is familial predisposition.

Spasmodic croup occurs most frequently in the evening or night with a sudden onset usually preceded by mild to moderate coryza and hoarseness.

The child awakens with a characteristic barking, metallic cough, noisy inspiration and respiratory distress and appear anxious and frightened.

Recommended zones for electromagnetic exposure: 2-4(CV-23), 5-1(CV-22), 10-5(LI-11), 11-4(LI-4), 15-3(KI-3), 16-1(ST-36), 16-7(ST-44).

Use for one therapeutic session 4-5 recommended zones daily. Expose for 3 minutes each zone. Change zones during the treatment course. The treatment course is 10 days. It is recommended to take 2 five days with break in 2 weeks.

13.17. Stuttering

Stuttering is an interference with the normal flow of speech, actual (physical) or anticipated (psychologic). Stuttering usually involves noticeable and excessive dysfluencies such as repeating, hesitating, prolonging, or blocking on speech sounds. Stuttering usually develops in 2 stages, primary and secondary.

In the primary stage the child appears to be without self-awareness or self-concern for the noticeable dysfluencies in this speech.

In the secondary stage the child either becomes aware or is made aware of the dysfluencies seeks to minimize, prevent or avoid them, and attempts to produce perfect speech.

An essential part of therapy program is parent counseling.

The parent(s) should be given information regarding the problem and suggestions to attenuate the emotional and psychologic tensions which may contribute to or which may be activated by stuttering.

Recommended zones for electromagnetic exposure:

First day - 2-3(CV-24), 2-4(HT-23), 3-1(GV-20), 3-6(GB-20), 4-7(TE-17), 4-9(ST-6),

Second day - 5-1(CV-22), 8-1(GV-14), 11-4(LI-4), 12-7(HT-5), 16-1(ST-36), 16-4(LR-3).

Use for one therapeutic session all the recommended zones daily. Expose for 3 minutes for each zone. Take turns first and second days zones during the treatment course. The treatment course is 10 days. It is recommended to repeat treatment course with break in 4-6 weeks during 12 months.

13.18. Headache

Informational radiowave therapy should start only when the cause of headache is found and pharmacologic measures are taken.

Recommended zones for electromagnetic exposure:

For frontal area headache: 1-2(GB-14), 4-2(GB-8), 11-4(LI-4), 16-3(ST-41).

For temporal area headache: 4-3(TE-20), 11-2(TE-5).

For occipital area headache: 3-1(GV-20), 3-7(BL-10), 12-4(PC-6), 12-5(LU-7), 13-3(BL-60),

16-4_(LR-3)

Use all the recommended zones for one therapeutic session daily. Expose 3 minutes for each area.

13.19. Nervous vomiting

Recommended zones for electromagnetic exposure: **1-1**_(GV-24), **4-4**_(TE-19), **6-6**_(CV-12), **8-3**_(GB-21),
12-4_(PC-6), **16-1**_(ST-36), **16-8**_(ST-45).

Use for one therapeutic session all the recommended zones daily. Expose each area for 3 minutes. It is recommended take session until clinical improvement.

13.20. Anorexia

Recommended zones for electromagnetic exposure: **12-4**_(PC-6), **12-9**_(HT-7), **15-1**_(SP-6), **16-1**_(ST-36),
16-4_(LR-3).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 10 days.

13.21. Constipation

Recommended zones for electromagnetic exposure: **11-1**_(TE-6), **11-4**_(LI-4), **15-1**_(SP-6), **16-1**_(ST-36),
7-3_(BL-8).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each zone. The treatment course is 5 days.

13.22. Allergic rhinitis

Recommended zones for electromagnetic exposure: **1-3**_(BL-2), **8-1**_(GV-14), **10-5**_(LI-11), **11-4**_(LI-4),
12-1_(LU-5), **2-2**_(E-3).

Use all the recommended zones for one therapeutic session daily. Expose for 5 minutes each area. The treatment course is 8 days. It is recommended 5 days course with break in 2 weeks during 2 months. Take prophylactic course 2 weeks before blooming.

13.23. Urticaria (hives)

Recommended zones for electromagnetic exposure: **10-5**_(LI-11), **15-1**_(SP-6), **16-1**_(ST-36), **18-4**_(SP-9),
18-5_(SP-10).

Use all the recommended zones for one therapeutic session daily. Expose for 3 minutes each area. The treatment course is 7 days.

13.24. Nocturnal enuresis

Informational radiowave therapy is recommended for children with psychological problems or deep sleep with nightmares.

Recommended zones for electromagnetic exposure:

First day: 3-1(GV-20), 5-5(CV-17), 12-9(HT-7), 9-3(BL-23), 9-7(BL-31), 9-2(GV-4),

Second day: 3-6(GB-20), 7-8(CV-3), 18-1(GV-1), 9-2(GV-4), 16-5(LR-2), 15-3(KI-3), 16-1(ST-36).

Use all the recommended zones for one therapeutic session daily. Expose for 3 minutes each area. Change the zones each two days during the treatment course. The treatment course is 10 days. It is recommended to take 5 days course with break in 4 weeks during 3 months.

13.25. Neurotic tics

Recommended zones for electromagnetic exposure: 1-8(LI-20), 2-2(ST-3), 6-1(CV-15), 6-6(CV-12), 10-3(TE-10), 11-4(LI-4), 13-2(GB-39), 13-4(BL-62), 16-1(ST-36), 16-4(LR-3), 3-1(GV-20).

Extra points

For facial spasms: 1-10(SI-18).

For forehead and eyes muscles: 1-2(GB-14), 1-3(BL-2), 1-9(ST-2), 1-10(SI-18).

For upper lip muscle: 2-1(GV-26).

For lower lip muscle: 2-3(CV-24), 4-7(TE-17), 4-9(ST-6).

Use for one therapeutic session 5-6 zones. Expose for 3 minutes each area. Change the zones during treatment course. The treatment course is 8 days. It is recommended repeating the treatment course with break in 4 weeks during 3-4 months.

13.26. Sleep disorders

Sleep disorders are caused by anxiety, night fears and nightmares.

Recommended zones for electromagnetic exposure: 12-1(LU-5), 12-9(HT-7), 12-10(PC-7), 13-4(BL-62), 15-4(KI-6), 16-7(ST-44), 16-8(ST-45), 3-1(GV-20).

Extra points

For the child awakens during the night: 3-6(GB-20), 1-3(BL-2), 12-6(LU-9);

For the child cannot fall into sleep long time because of the fears: 11-6(HT-9), 12-14(PC-9), 16-5(LR-2).

Use 5-6 zones for one treatment session daily. Expose for 3 minutes each zone. Change the zones during the treatment. The treatment course is 5 days.

13.27. Indigestion (dyspepsia)

The symptoms include diarrhea, appetite loss, bloating and others.

Recommended zones for electromagnetic exposure: 6-6(CV-12), **7-2**(ST-25), **9-6**(BL-25), **11-4**(LI-4),
15-1(SP-6), **16-1**(ST-36).

Extra points

For nausea and vomiting: 12-4(PC-6),

For constant diarrhea: 7-3(CV-8), **7-6**(CV-4).

Use 5-6 zones for one therapeutic session daily. Expose for 3 minutes each zone. Change the zones during the treatment course. The treatment course is 2-3 days. It is required pediatrician consultation.

13.28. Neurotic encopresis

Recommended zones for electromagnetic exposure:

First day: 3-1(GV-20), **7-6**(CV-4), **9-6**(BL-25), **9-9**(GV-2), **11-1**(TE-6), **12-4**(PC-6)

Second day: 13-3(BL-60), **15-1**(SP-6), **15-6**(SP-4), **16-1**(ST-36), **16-7**(ST-44), **18-1**(GV-1).

Use for one treatment session all the recommended zone daily. Expose for 3 minutes for each zone. Change the zones from the first and second days during the treatment course. The treatment course is 10 days. It is recommended to repeat 5 days courses with break in 4 weeks during 3 months.

13.29. The other pediatric symptoms

Recommended zones for electromagnetic exposure:

For bad character, disobedience: 3-1(GV-20), **5-5**(CV-17), **12-9**(HT-7), **15-1**(SP-6);

For night awakening and wince: 11-6(HT-9), **12-7**(HT-5), **12-10**(PC-7), **14-1**(BL-40);

For night fears: 12-14(PC-9), **16-5**(LR-2), **11-6**(HT-9), **1-3**(BL-2);

For nightmares: 12-1(LU-5), **11-6**(HT-9), **12-14**(PC-9), **16-5**(LR-2), **16-7**(ST-44);

For pathologic fantasy generation: 8-1(GV-14), **16-1**(ST-36).

Use for one treatment session all the recommended zone daily. Expose for 5 minutes each zone. The treatment course is 5-7 days.

Chapter 14. Trauma and other consequences of the exposure of exogenous factors

14.1. Local treatment

Informational radiowave therapy suggests nonpharmacological treatment of many disturbances of normal physiologic condition. It is effective in local treatment of bone fractures, bruises, wounds, hemorrhages, irradiating pain in the back and joints, trophic ulcer, furunculosis, scar tissues, skin stretching and others.

The methods of using MINITAG[®] are very simple.

Expose affected area on the skin or painful area for 10-15 minutes before the apparatus. It is recommended to hold the radiator of the MINITAG[®] on distance of 2-5 mm.

14.2. Bone fractures

The therapeutic exposure should make through the plaster cast. Place the apparatus over the fractured site for 15-20 minutes. The treatment course is 14 days. The early beginning of therapy is desirable. The informational radiowave therapy provides rapid relief of pain and swelling, accelerates the healing process in tissues and prevents the development of pseudoarthrosis and fistulization.

14.3. Wounds (cuts, operative wounds, burns)

First aid includes the arrest of bleeding and the applying of aseptic bandage. The informational radiowave therapy may be started right after the first care.

The therapeutic exposure should make through the bandage. Slowly make round motions with the radiator of the apparatus above the wound, involve the healthy areas of the skin for 10-15 minutes. The treatment course is 5-7 days. The exposure of electromagnetic waves on open wounds (without dressing) is more effective.

14.4. Bruises

Early treatment gives the best result. It promotes the rapid relief of swelling and pain. The informational radiowave therapy may provide rapid resolution of bruises. Put the radiator of the apparatus over the bruise site and move slowly around in 2 minutes involving healthy areas during 10-15 minutes. Hold the apparatus above on the distance of 2-5 mm. The treatment course is 3-14 days.

14.5. Trophic ulcers

After initial antiseptic debridement of trophic ulcer the informational radiowave session may be started. Move slowly the radiator of the apparatus MINITAG[®] above the ulcer involving healthy areas for 10-15 minutes. Hold the apparatus above the ulcer on the distance of 2-5 mm. The treatment course is 3-14 days.

14.6. Furuncle (carbuncle, acne vulgaris)

The treatment may perform on any stage of the development of abscess but it is better to start on infiltration stage.

Expose each affected skin site for 10 minutes. Hold the therapeutic session 3 times in a day for the first 2 days then continue with one therapeutic session a day. The treatment course is 5 days.

14.7. Scars, scar tissues

Move slowly the radiator of the apparatus MINITAG[®] above the skin defect involving the healthy sites during 10-15 minutes. The treatment course is 10-15 days. It is recommended to do 6days treatment course in 2 weeks during 3 months.

14.8. Sunstroke (heat stroke)

Sunstroke (heat stroke) occurs in previously healthy persons undergoing strenuous exertion in a thermally stressful environment (intensive or long time exposure of solar or heat radiation).

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **8-1**(GV-14), **11-4**(LI-4), **12-2**(PC-3),
12-4(PC-6), **14-1**(BL-40), **15-8**(KI-1), **16-1**(ST-36).

Use 5-6 recommended zones for one therapeutic session daily. Expose for 5 minutes each area. Change the zones during the treatment course. The duration of treatment is 3-5 days. On first day perform therapeutic sessions two times.

14.9. Motion sickness

Motion sickness is pathologic condition occurring in some people during air or sea traveling. It results from continuous vestibular stimulation and manifests by general weakness, dizziness, hypersalivation, sweating, nausea and vomiting.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **5-5**(CV-17), **12-9**(HT-7), **12-10**(PC-7),
16-1(ST-36), **16-5**(LR-2).

Before traveling use all the recommended zones. Expose for 5 minutes each area.

If the symptoms (fainting, hypersalivation, nausea, vomiting) occur immediately seek first medical care.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **5-5**(CV-17), **6-6**(CV-12), **11-4**(LI-4),
13-3(BL-60), **15-2**(KI-7), **16-1**(ST-36).

Use all the recommended zones. Expose for 5 minutes each area. Repeat the therapeutic sessions if there is need for it every 3-4 hours.

14.10. Chronic fatigue syndrome

That state, following a period of mental or bodily activity, characterized by a lessened capacity for work and reduced efficiency of accomplishment, usually accompanied by a feeling of weariness, sleepiness, or irritability; may also, supervene when, from any cause, energy expenditure outstrips restorative processes and may be confined to a single organ.

The informational radiowave therapy of fatigue includes one-time treatment but the treatment may be performed as long-term even if the symptoms are relieved.

Muscular fatigue usually manifests in certain muscle group exposed to the greatest muscle tension on working.

Recommended zones for electromagnetic exposure: **11-2**(TE-5), **11-4**(LI-4), **12-10**(PC-7),
14-1(BL-40), **16-1**(ST-36).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area. If muscle cramps are present expose locally for 5-10 minutes until complete termination of muscle cramps.

Mental fatigue is characterized by impairment of mental abilities such as impaired memory or concentration, depression. This condition accompanies by the cardio-vascular and psychoemotional disturbances.

Recommended zones for electromagnetic exposure: **3-1**(GV-20), **5-5**(CV-17), **8-1**(GV-14), **11-4**(LI-4),

12-9_(HT-7).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area.

Physical fatigue is characterized by reduction of exercise performance and functional disturbances of cardiovascular, respiratory and muscular systems.

Recommended zones for electromagnetic exposure: **5-4**_(LU-2), **12-9**_(HT-7), **12-10**_(PC-7), **15-2**_(KI-7),
16-1_(ST-36), **16-5**_(LR-2).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area.

Vision fatigue is the physiologic state of the perception of two different colors as the same ones at stare for a period of time. It is caused by the impairment of the color adaptation manifested by reduction of color perception.

Recommended zones for electromagnetic exposure: **1-4**_(BL-1), **1-6**_(ST-1), **1-7**_(GB-1), **3-7**_(BL-10),
11-2_(TE-5), **16-4**_(LR-3).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area.

The decreasing of emotional reactions manifests **emotional fatigue**. It occurs as the result of exposure of supramaximal and monotone stimulus.

Recommended zones for electromagnetic exposure: **3-1**_(GV-20), **5-5**_(CV-17), **11-4**_(LI-4), **12-9**_(HT-7),
12-10_(PC-7).

Use all the recommended zones for one therapeutic session. Expose for 5 minutes each area.

Chapter 15. Cosmetology

Beautiful skin at any age is not a vain dream.

From the time when pharmaceutical laboratories start to study complex microprocesses in the skin we can prevent skin senescence and decrease the development of the wrinkles.

Today we like to introduce to you the newest invention in that area – informational radiowave therapy. How do the wrinkles form? When you notice the first mimic wrinkles on your skin around the mouth you become distressed and think that age is not make you younger but older. How does the wrinkle form?

First of all, it is physiologic aging process and all people experience it.

To third decade of life the renewal of cells occurs in 40 days at the age 30 not in 28 days like it was occurred before. The first wrinkles form on the skin of forehead in almost of 60% of women.

Environmental toxins are responsible for the wrinkle formation. Stress, lack of sleep and lack oxygen are negatively influence on skin health. Our method helps to avoid the influence of these noxious agents.

Using the informational radiowave method to improve the skin condition on the face you can solve problem with your insomnia, vegeto-vascular dystonia, gastrointestinal disorders if you have its.

The using of MINITAG[®] in combination with proper cosmetic care of facial skin may slow down the aging process of the skin. It improves and makes younger the skin structure, protects it from environmental noxious factors, prevents skin from aging.

The informational radiowave therapy positively effects on entire skin, improves its structures and regulates water metabolism in the skin protecting it from aging and dryness.

The method of using it is very simple. We present recommended zones for electromagnetic exposure on the illustration № 19. Clean your skin with appropriate for your cosmetic lotion before therapeutic session.

Start to expose from “red” zones for 2 minutes on each area. Then go to “blue” zones and slowly move the apparatus over the skin sparing on each area (forehead, nose, cheeks, chin) for 2 minutes. Make the soft movements trying not to tighten the skin. After the therapeutic session apply nutritious cream.

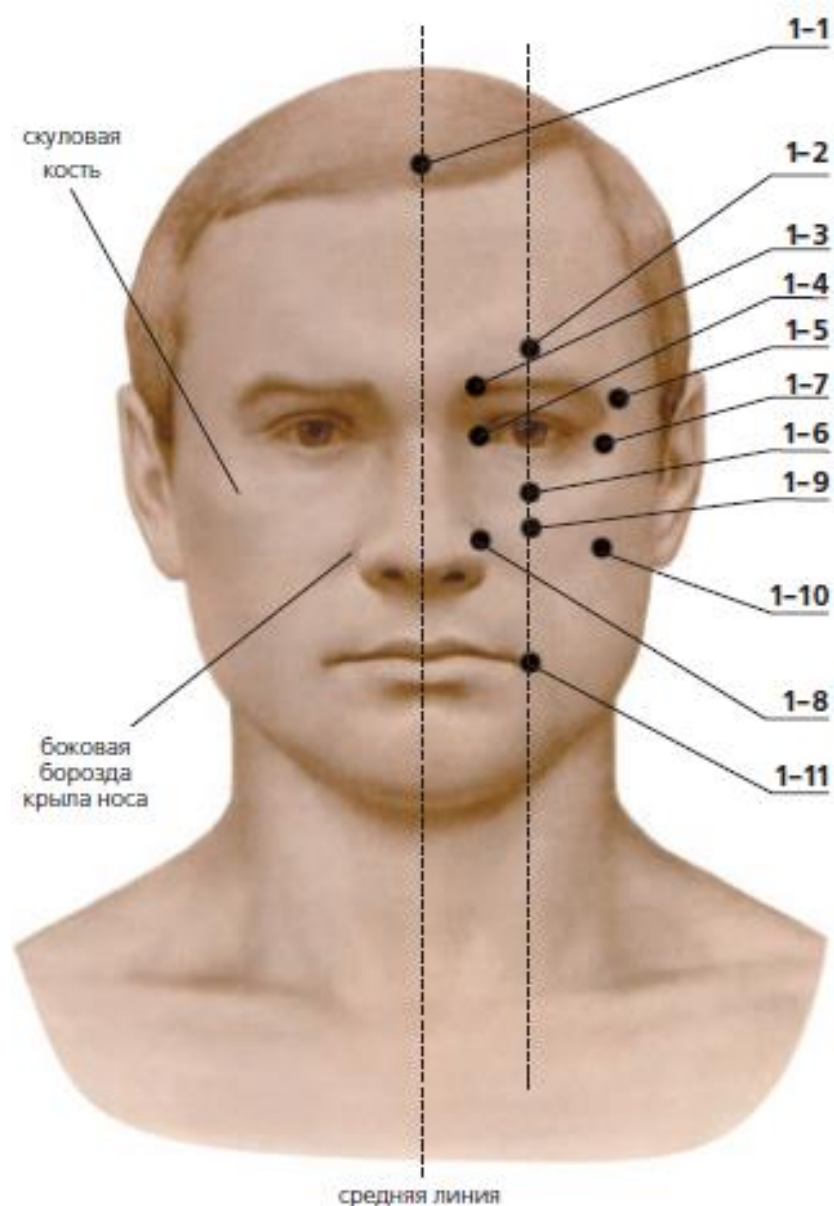
It is recommended to do therapeutic sessions every day. The treatment course is 8-10 days. Repeat the treatment course in 1-2 months.

The result will exceed all your expectations!

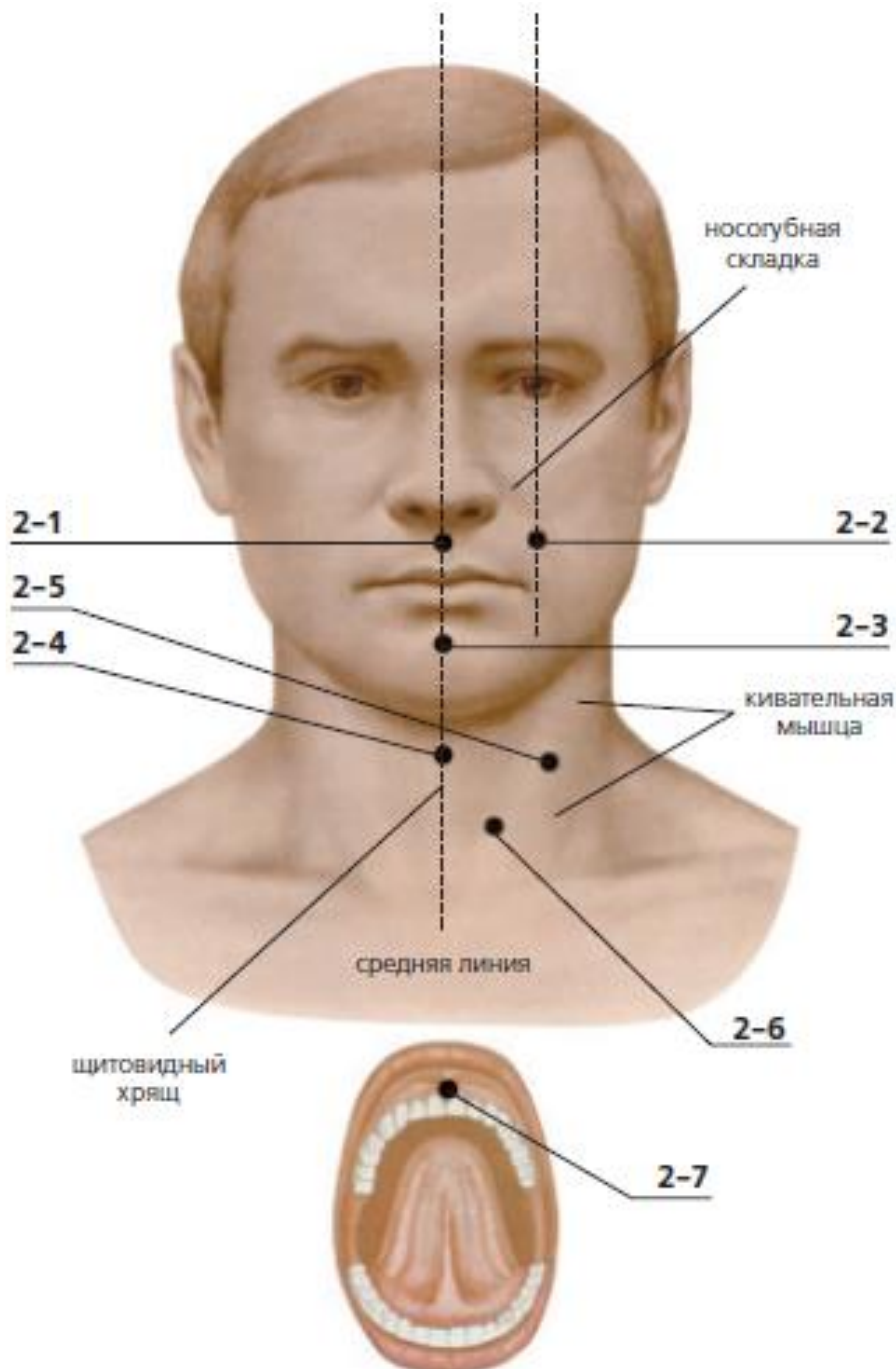
Illustrations

Recommended zones for electromagnetic exposure

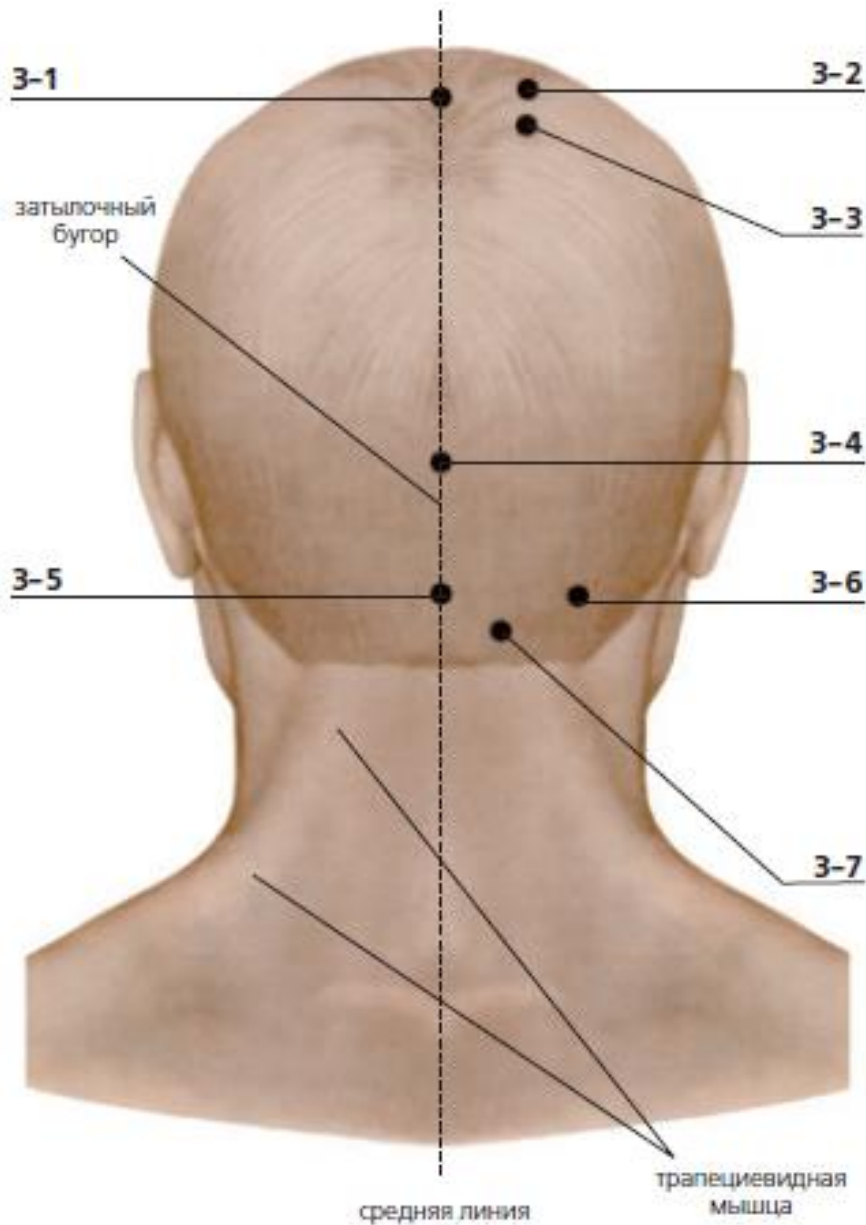
- 1-1 – on midline of the head, 0.5 chon upper from the anterior hair margin
- 1-2 – 1 chon upper from center of eyebrow
- 1-3 – at the beginning of eyebrow
- 1-4 – 3 mm far from internal side of eye to the nose
- 1-5 – at the external end of eyebrow, in fovea
- 1-6 – under the pupil, on the center of lower edge of the orbit
- 1-7 – 5 mm from external angle of the eye
- 1-8 – in the lateral sulcus of wing of nose
- 1-9 – 10 mm below from the 1-6
- 1-10 – in the recess at low margin of zygomatic bone, vertically and lower from external angle of eye
- 1-11 – angle outwards from 1 cm on a vertical line through the pupil.



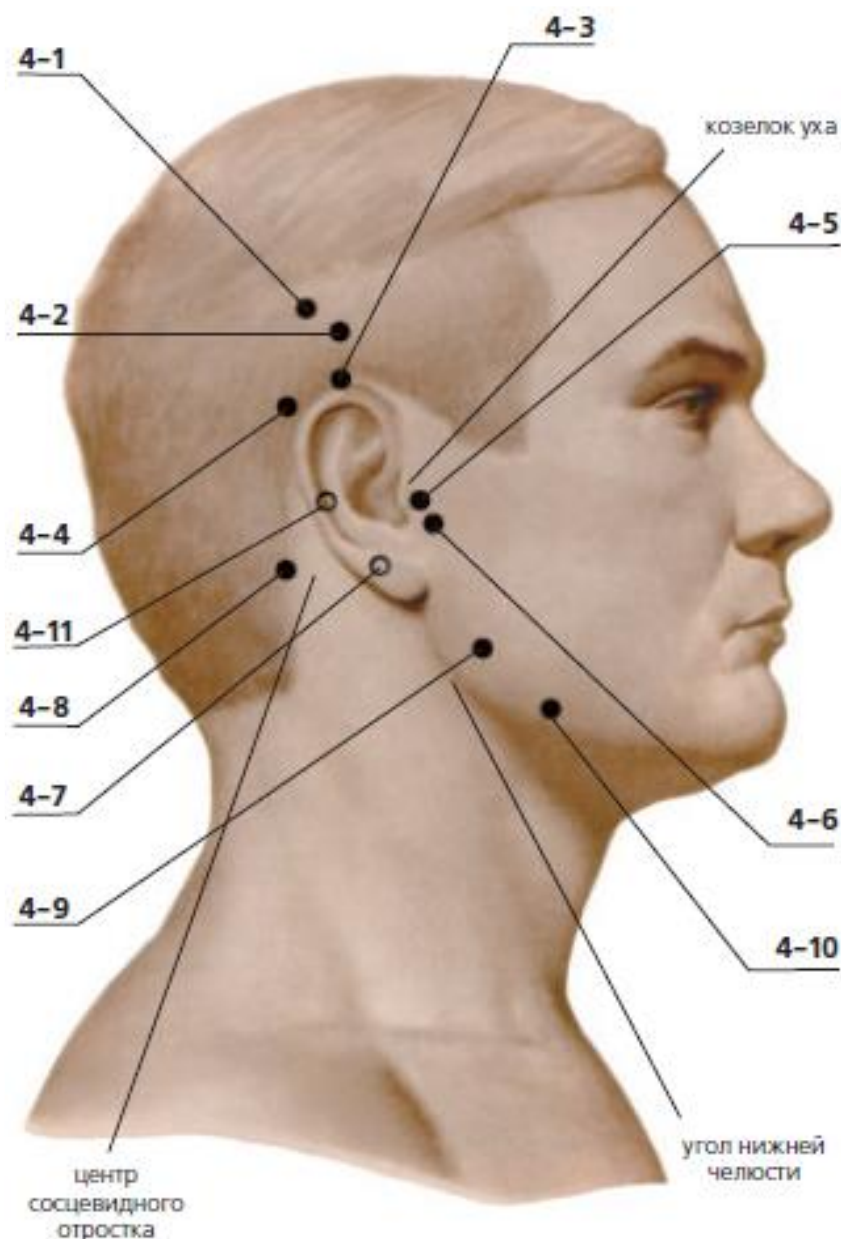
- 2-1 – under the nose, above upper lip, in fovea
- 2-2 – in nasolabial fold on intersection point with vertical line going from the center of pupil
- 2-3 – on the center of chin-lip fold
- 2-4 – on midline 5 mm above from the upper margin of thyroid cartilage
- 2-5 – outside from upper margin of the thyroid cartilage, on the center of sternocleidomastoid muscle
- 2-6 – outside from lower margin of the thyroid cartilage, at anterior margin of sternocleidomastoid muscle
- 2-7 – on the upper gingival margin, on the frenulum of upper lip (on border of transition of a mucous membrane of a upper lip in gum)



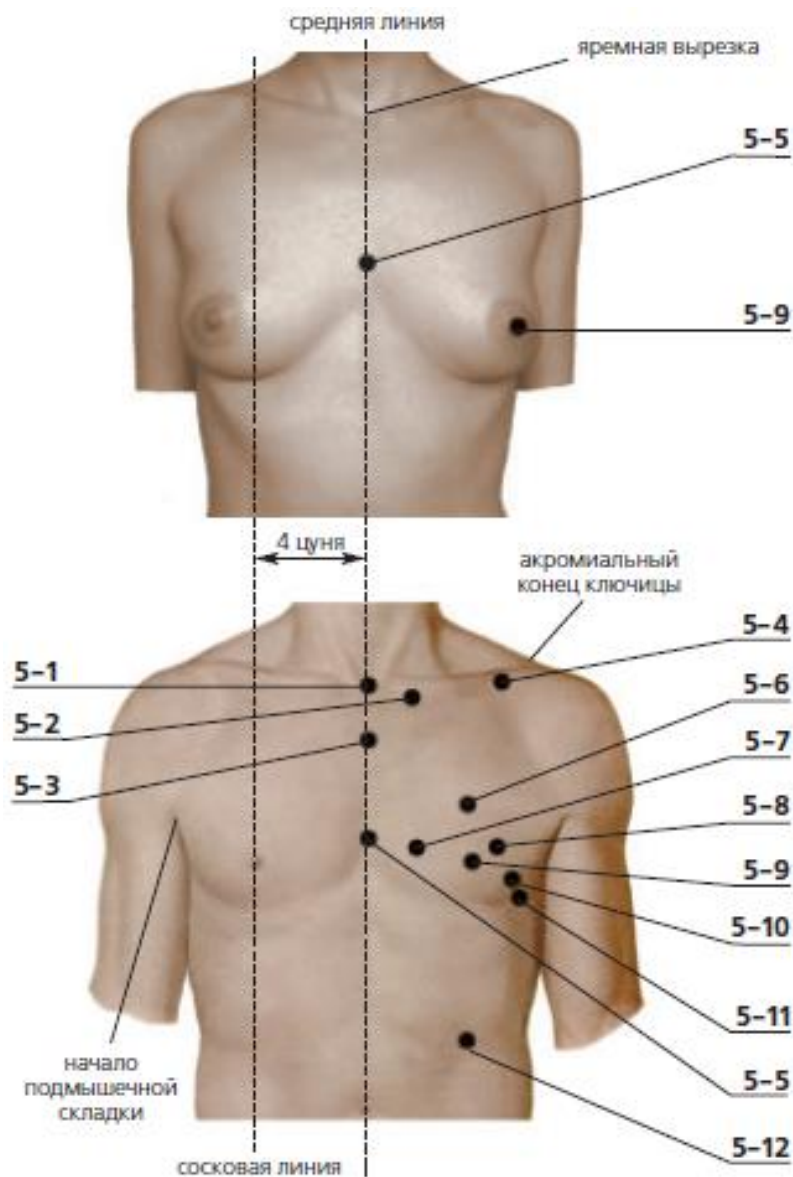
- 3-1** – on midline 7 chon upper from posterior hair margin or 5 chon back from anterior hair margin
- 3-2** – 4 chon back from anterior hair margin and 1,5 chon far from midline of head, on the crown of head
- 3-3** – 5,5 chon back from anterior hair margin and 1,5 chon far from midline
- 3-4** – on midline on the upper margin of occipital tuber, 2,5 chon upper from posterior hair margin
- 3-5** – in occipital fossa
- 3-6** – under occipital bone, at external border of trapezius muscle, on the parallel line to ear lobule, in fossa
- 3-7** – 20 mm upper from posterior hair margin and 1,3 chon far from midline. The area is painful on palpation.



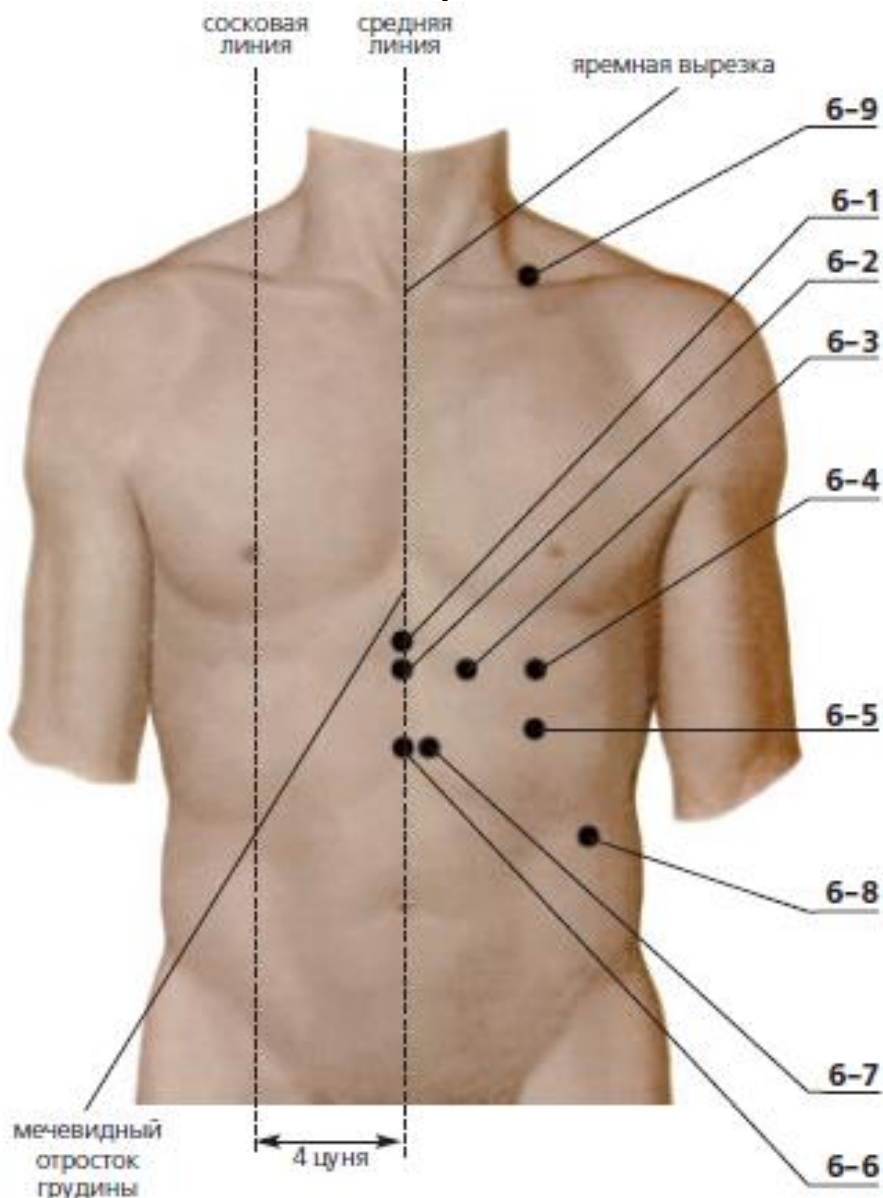
- 4-1 – 2 chon above from upper ear margin, backward, on the vertical line from the center of mastoid process
- 4-2 – 1,5 chon upper from upper ear margin (1,5 chon upper from 4-3)
- 4-3 – at upper ear margin
- 4-4 – 1 chon below from 4-3, behind the ear
- 4-5 – between tragus of ear and mandibular joint, in the fossa when someone opens mouth
- 4-6 – ahead and below from ear tragus, in the fossa
- 4-7 – behind the ear lobule, in fossa
- 4-8 – at posterior margin of mastoid process on horizontal line from area 4-7
- 4-9 – 0,5 chon anteriorly and upper from mandibular angle, in the fossa. The area is painful on palpation.
- 4-10 – 1,3 chon anteriorly from mandibular angle on its low margin.
- 4-11 - behind the ear on the same level with the external auditory opening anteriorly from the base mastoid of the temporal bone.



- 5-1 – in jugular notch of sternum, in the fossa
- 5-2 – 2 chon far from midline under clavicle
- 5-3 – on midline 2,5 chon below from jugular notch (from 5-1)
- 5-4 – under the low margin of acromial end of clavicle, in subclavicular fossa.
- 5-5 – on midline, 6 chon below from jugular notch, on the level of 4th intercostal space
- 5-6 – on mammary line, (4 chon far from midline), 4 chon below from clavicle, in 3rd intercostal space. The area is painful on palpation. It is easy to find the point in supine position.
- 5-7 – 2 chon from 5-5 along the rib, in 4th intercostal space. It is easy to find the point in supine position.
- 5-8 – 5 chon from 5-5 along the rib, in 4th intercostal space. It is easy to find the point in supine position.
- 5-9 – in the center of nipple
- 5-10 – 4,5 chon lower from beginning of axillary line in 4th intercostal space. It is easy to find the point in supine position.
- 5-11 – area is detected by intersection point of two lines – 6 chon below from beginning of axillary line and 6 chon far from midline, in 5th intercostal space. It is easy to find the point in supine position.
- 5-12 – above the level of the navel is 3 chon and sides of the midline 4 chon.



- 6-1** – on midline, 0,5 chon lower from the end xiphoid process, or 7 chon upper from umbilicus
- 6-2** – on midline 1,5 chon lower from xiphoid process of sternum or 6 chon upper from umbilicus
- 6-3** – 2 chon far from midline on the level of 6-2 (the place of attachment 8th rib cartilage to sternum)
- 6-4** – 4 chon far from midline on the level of 6-2, on mammary line (in 6th intercostal space). It is easy to find the point in supine position.
- 6-5** – 4 chon upper from umbilicus and 4 chon far from midline (on mammillary line, in 7th intercostal space). It is easy to find the point in supine position.
- 6-6** – on the midline 4 chon upper from umbilicus. It is easy to find the point in supine position.
- 6-7** – 4 chon upper from the umbilicus and 0,5 chon far from the midline. It is easy to find the point in supine position.
- 6-8** – at free edge of 11th rib. It is easy to find the point in supine position.
- 6-9** – in the center of the subclavian fossa, laterally from the midline chest 4 chon.



7-1 – 6 chon far from umbilicus along the horizontal line (a little below the free edge of 11th rib). It is easy to find the point in supine position.

7-2 – 2 chon far from umbilicus along the horizontal line.

7-3 – in the center of the umbilicus

7-4 – 1,5 chon lower from the umbilicus on midline

7-5 – 2 chon lower the umbilicus and 0,5 chon far from midline

7-6 – 3 chon lower the umbilicus on midline. It is easy to find the point in supine position.

7-7 – 3 chon lower the umbilicus and 2 chon far from midline. It is easy to find the point in supine position.

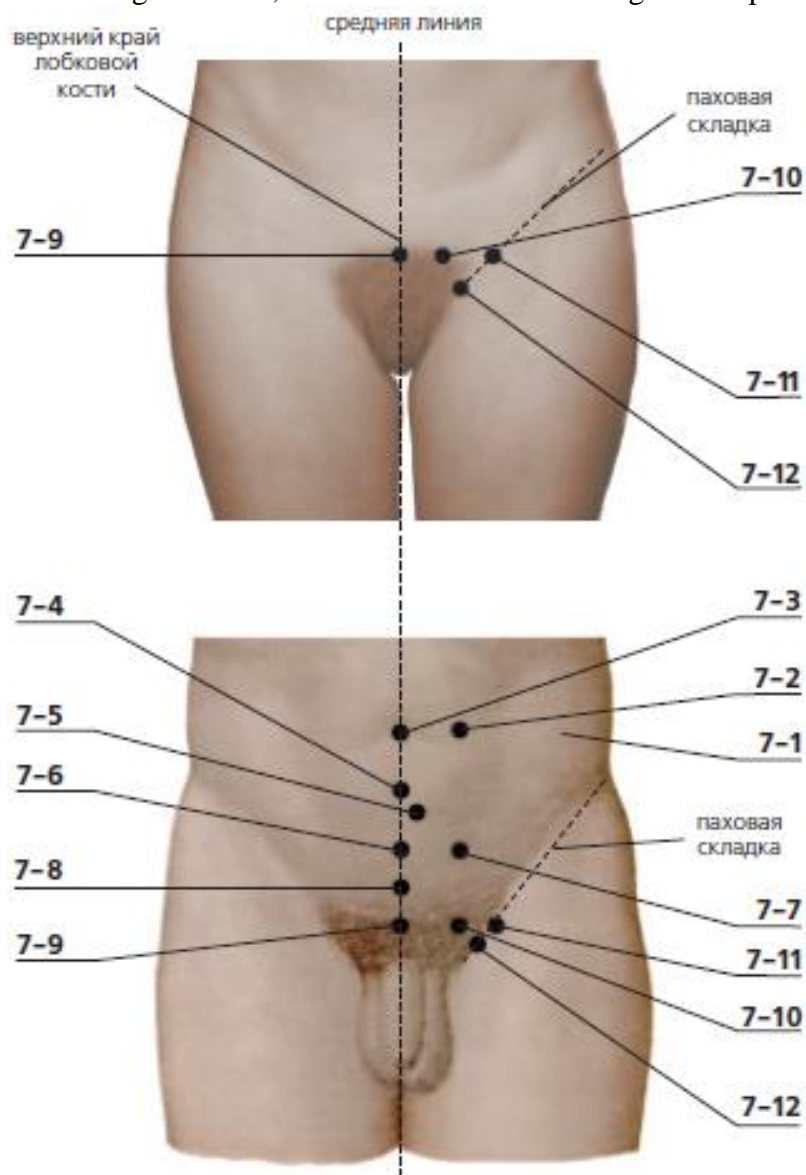
7-8 – 4 chon lower the umbilicus on midline. It is easy to find the point in supine position.

7-9 – on the center of upper edge of pubic bone. It is easy to find the point in supine position.

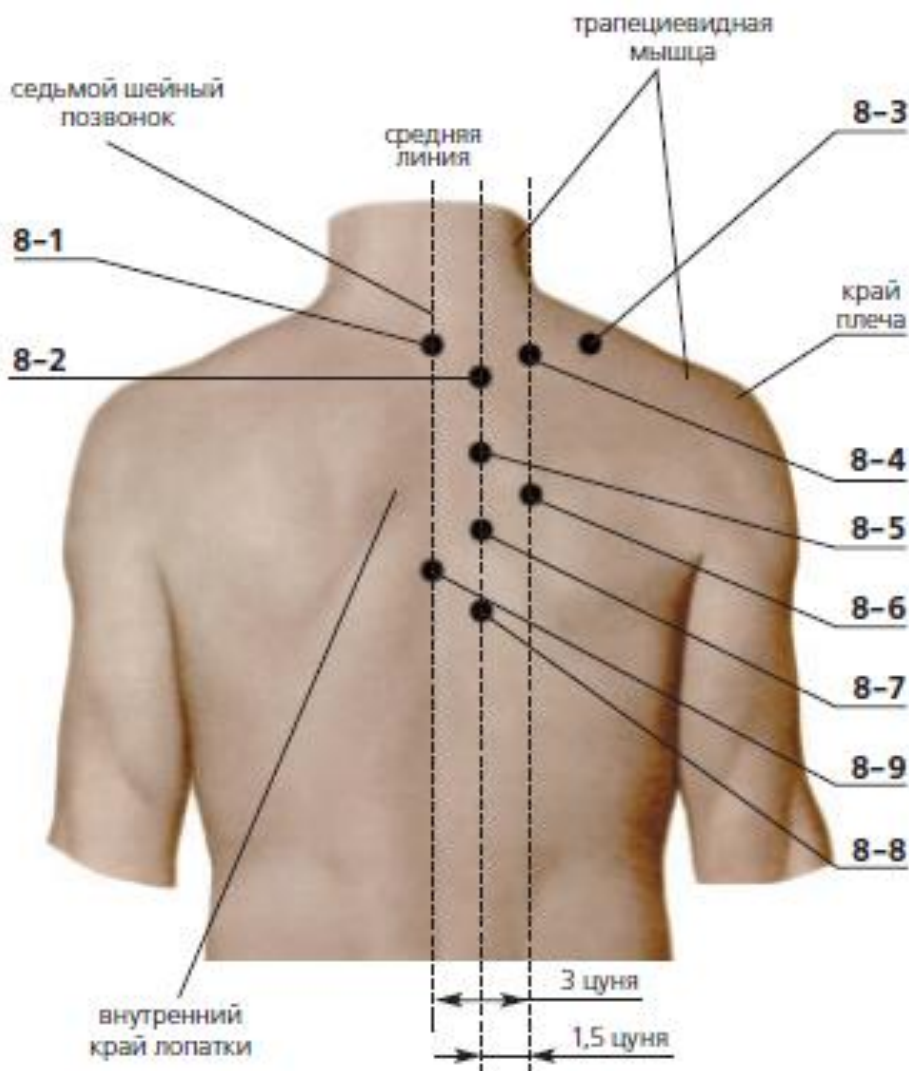
7-10 – at upper edge of pubic bone and 2 chon far from midline. It is easy to find the point in supine position.

7-11 – in the center of inguinal fold on the parallel line to 7-9 area. It is easy to find the point in sitting position.

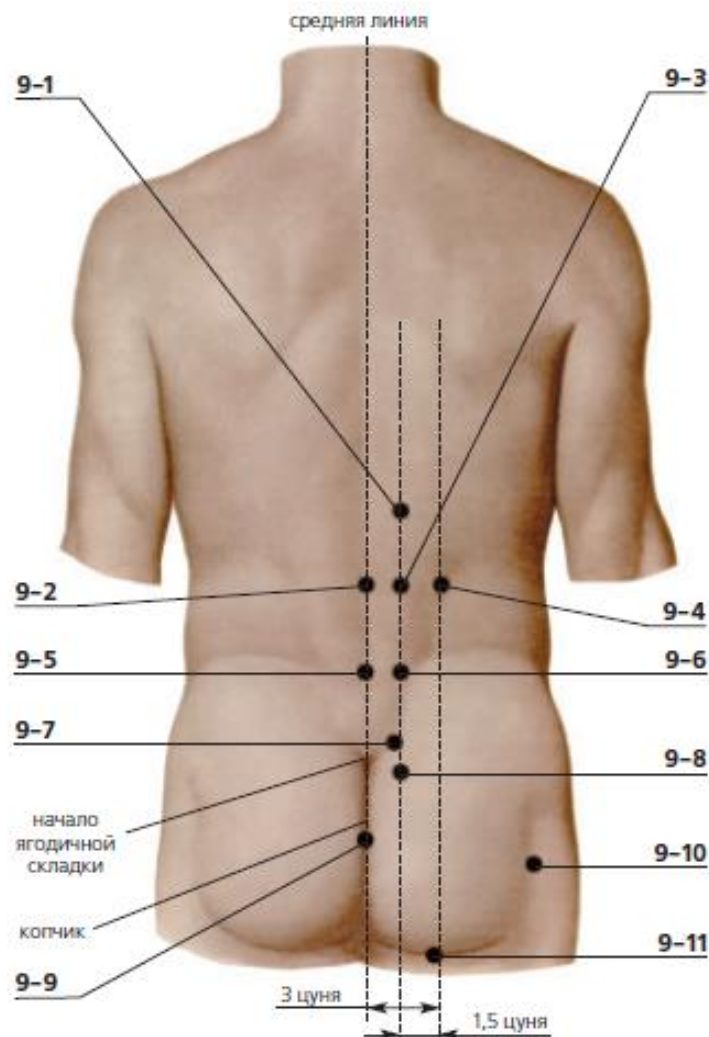
7-12 - in the middle of the inguinal fold, at the level of the lower edge of the pubic symphysis.



- 8-1** – under cervical (prominent) vertebra between spinous processes of 7th cervical and 1st thoracic vertebra
- 8-2** – between spinous processes 1st and 2nd thoracic vertebrae and 1,5 chon far from midline. It is easy to find the point in prone position.
- 8-3** – on middle of distance between 7th cervical vertebra and shoulder border, on the upper border of trapezius muscle. The point is painful on palpation.
- 8-4** – on the level of spinous process of 1st thoracic vertebra and 3 chon far from midline. It is easy to find the point in prone position.
- 8-5** – between spinous processes of 3rd and 4th thoracic vertebra and 1,5 chon far from midline. It is easy to find the point in prone position.
- 8-6** – between spinous processes of 4th and 5th thoracic vertebra and 3 chon far from midline. It is easy to find the point in prone position.
- 8-7** – between spinous processes of 5th and 6th thoracic vertebra and 1,5 chon far from midline. It is easy to find the point in prone position.
- 8-8** – between spinous processes of 7th and 8th thoracic vertebra and 1,5 chon far from midline. It is easy to find the point in prone position.
- 8-9** – between spinous processes of 6th and 7th thoracic vertebra.



- 9-1** – between spinous processes of 12th thoracic and 1st lumbar vertebra and 1,5 chon far from midline. It is easy to find the point in prone position.
- 9-2** – between spinous processes of 2nd and 3rd lumbar vertebra on midline. It is easy to find the point in prone position.
- 9-3** – between spinous processes of 2nd and 3rd lumbar vertebra and 1,5 chon far from midline. It is easy to find the point in prone position.
- 9-4** – between spinous processes of 2nd and 3rd lumbar vertebra and 3 chon far from midline. It is easy to find the point in prone position.
- 9-5** – between spinous processes of 4th and 5th lumbar vertebra, on midline. It is easy to find the point in prone position.
- 9-6** – between spinous processes of 4th and 5th lumbar vertebra and 1,5 chon far from midline. It is easy to find the point in prone position.
- 9-7** – 1 chon upper from beginning of gluteal fold and 1 chon far from midline (on upper edge of sacrum). It is easy to find the point in prone position.
- 9-8** – 1,5 chon lower from beginning of gluteal fold and 1,5 chon far from midline (between spinous processes of 2nd and 3rd sacral vertebra). It is easy to find the point in prone position.
- 9-9** – on midline under coccyx. It is easy to find the point in prone position.
- 9-10** – on buttock behind of hip joint. It is easy to find the point in prone position.
- 9-11** – in the center of subgluteal fold. It is easy to find the point in prone position.



10-1 – on the back surface of a humeral joint, under acromion process of scapula

10-2 – between acromion process of scapula and greater trochanter of humerus where fossa forms when someone raises the hand

10-3 – 2 chon upper from the elbow on posterior surface of humerus, between tendons. The point is painful on palpation.

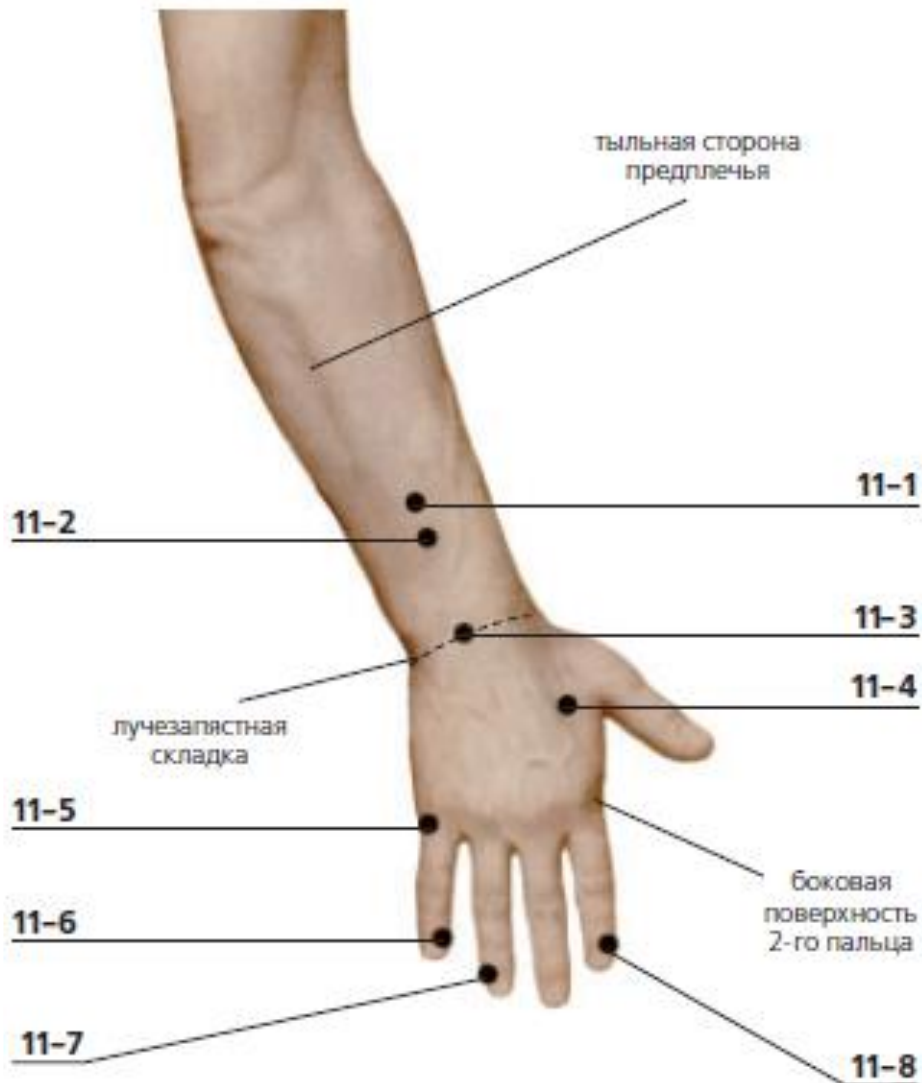
10-4 – in sulcus between elbow and medial epicondyle of humerus. The point is painful on palpation.

10-5 – the point is easy to detect at the hand bent in an elbow; 1 chon from the end of skin fold to an elbow

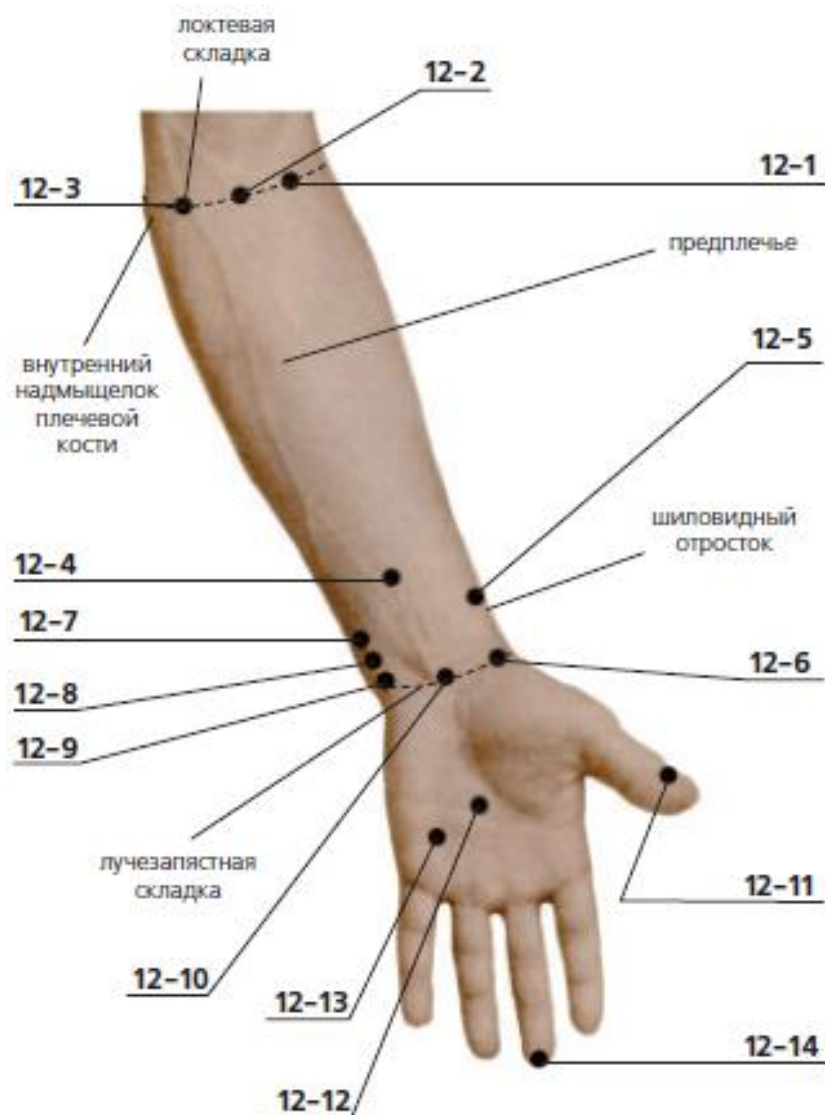
10-6 – on the dorsal surface of forearm, 2 chon below from 10-5. The area is painful on palpation.



- 11-1** – in the middle of back surface of forearm, 3 chon upper from radiocarpal crease
- 11-2** – in the middle of back surface of forearm, 2 chon upper from radiocarpal crease
- 11-3** – on back surface of forearm in the center of radiocarpal crease
- 11-4** – on the lateral surface of second finger, between first and second fingers, in fossa
- 11-5** – on external side of V finger, in fossa, on the border palm and dorsum
- 11-6** – at the internal angle of nail of V finger
- 11-7** – at external angle of nail of IV finger
- 11-8** – at internal angle of nail of II finger



- 12-1 – 1 chon from 12-2 area on elbow crease
- 12-2 – in the middle of elbow crease
- 12-3 – 1 chon from 12-2 area to the side of medial epicondyle on elbow crease
- 12-4 – 2 chon upper from radiocarpal crease, in the middle of forearm
- 12-5 – 1,5 upper from radiocarpal crease, a little above styloid process of ulna, in the fossa
- 12-6 – a little below styloid process of ulna, on radiocarpal crease
- 12-7 – 1 chon upper from radiocarpal crease, in fossa between two tendons
- 12-8 – 0,5 chon upper from radiocarpal crease, in fossa between two tendons
- 12-9 – on radiocarpal crease, over pisiform bone
- 12-10 – in the middle of radiocarpal crease, in the fossa between two tendons
- 12-11 – at external angle of I finger's nail
- 12-12 – in the center of palm, between the ends of III and IV fingers on bent fingers
- 12-13 – between the ends of IV and V fingers on bent fingers
- 12-14 – on the end of III finger



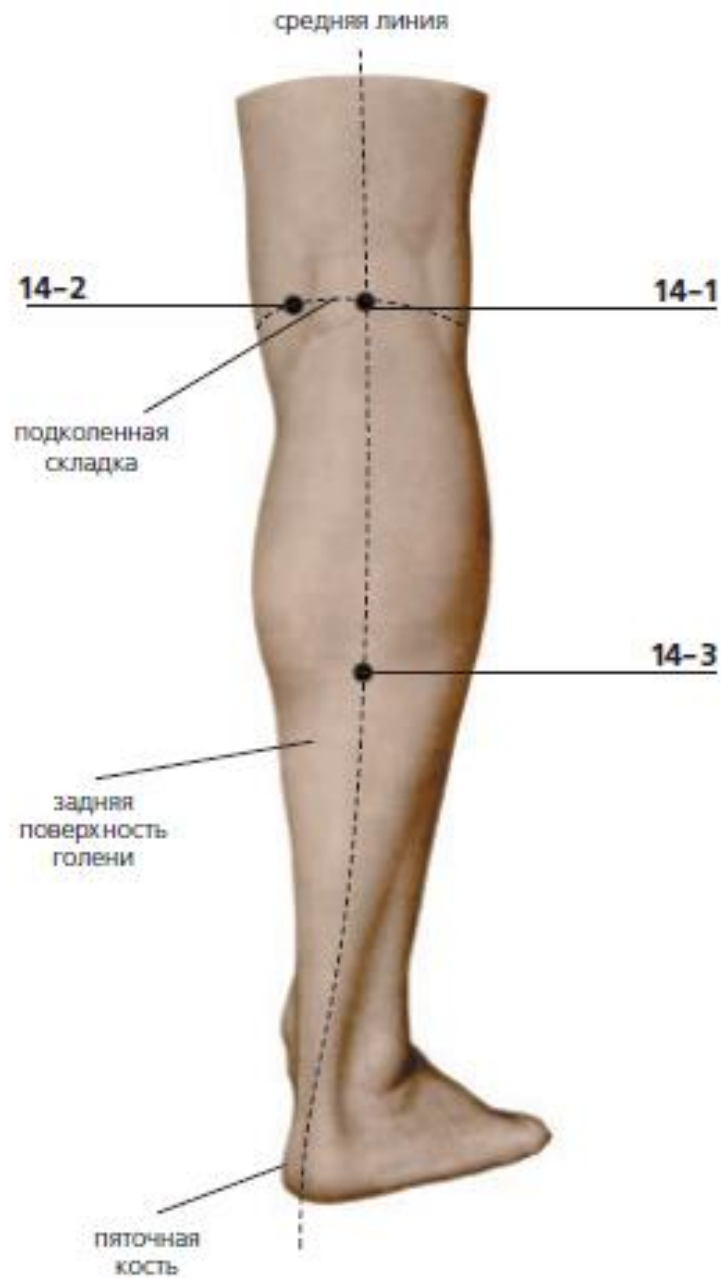
- 13-1** – on the external side of leg, 2 chon below from low edge of patella
- 13-2** – 3 chon upper from the center of lateral malleolus and 0,5 chon ahead
- 13-3** – in the fossa between lateral malleolus and Achilles tendon
- 13-4** – under lateral malleolus
- 13-5** – forward from a zone 13-4, in fossa (at anterior margin of lateral malleolus)
- 13-6** – at the basis of V toe, in fossa, on border line between dorsum and sole
- 13-7** – on external corner of the nail fifth toe



14-1 – in the center of popliteal fossa. It is easy to find point on bent knee joint

14-2 – on popliteal crease, 1 chon from 14-1 between tendons on the pulsation of arteries. It is easy to find point when someone flexes the leg in knee joint

14-3 – on midline of posterior side of leg, 7 chon below from 14-1



15-1 – behind of tibia, 3 chon upper from the center of medial malleolus, on muscle. The area is painful on palpation

15-2 – 2 chon upper from the center of medial malleolus and a little behind (in the place where gastrocnemius muscle transforms into Achilles tendon).

15-3 – between medial malleolus and Achilles tendon, in fossa

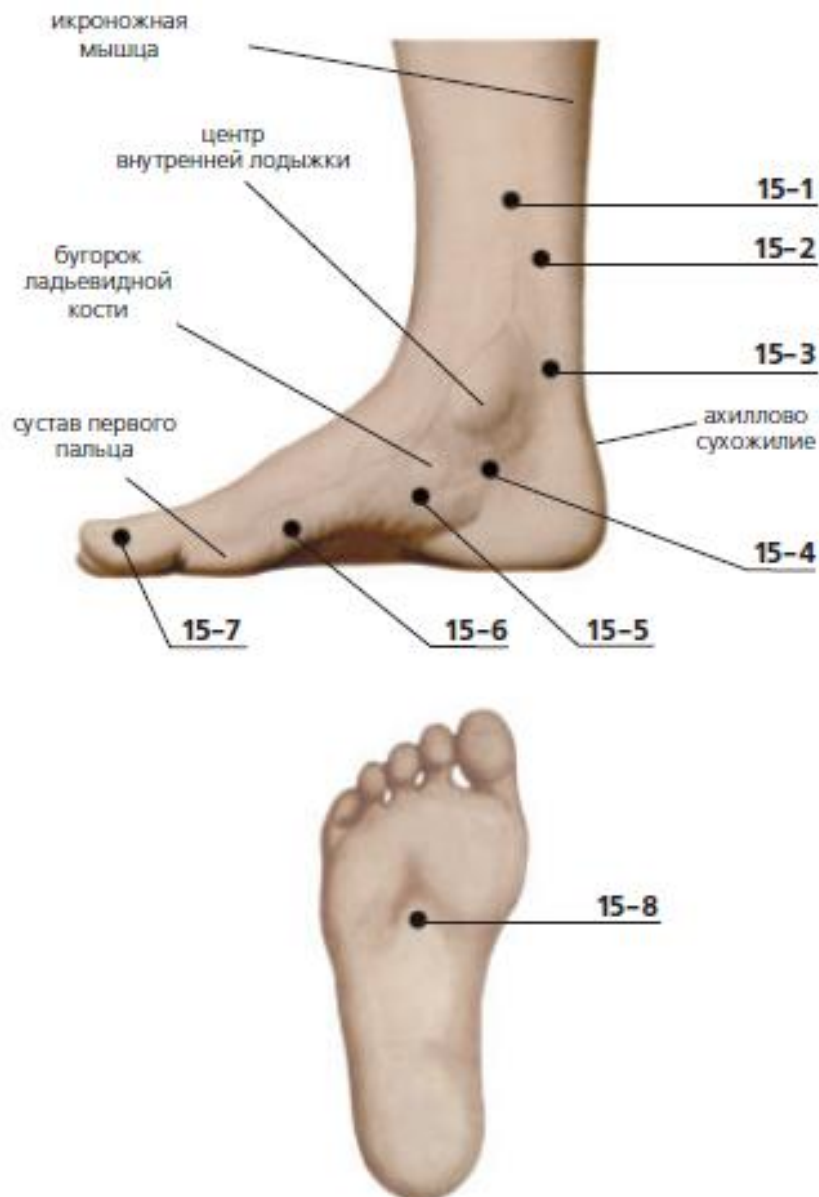
15-4 – 0,5chon below from medial malleolus

15-5 – in front of 15-4, a little below tubercle of navicular bone, in fossa Forward from a zone 2-4

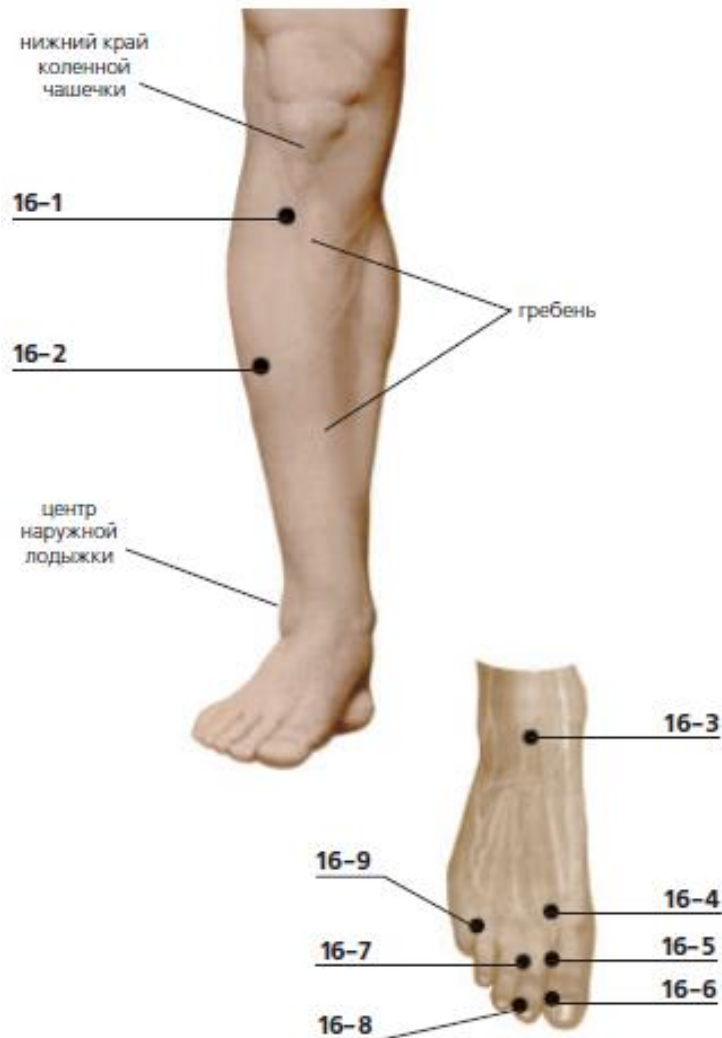
15-6 – 1 chon behind of I interphalangeal joint

15-7 – on internal side of I toe's nail

15-8 – in the center of sole, in fossa. The area is painful on palpation.

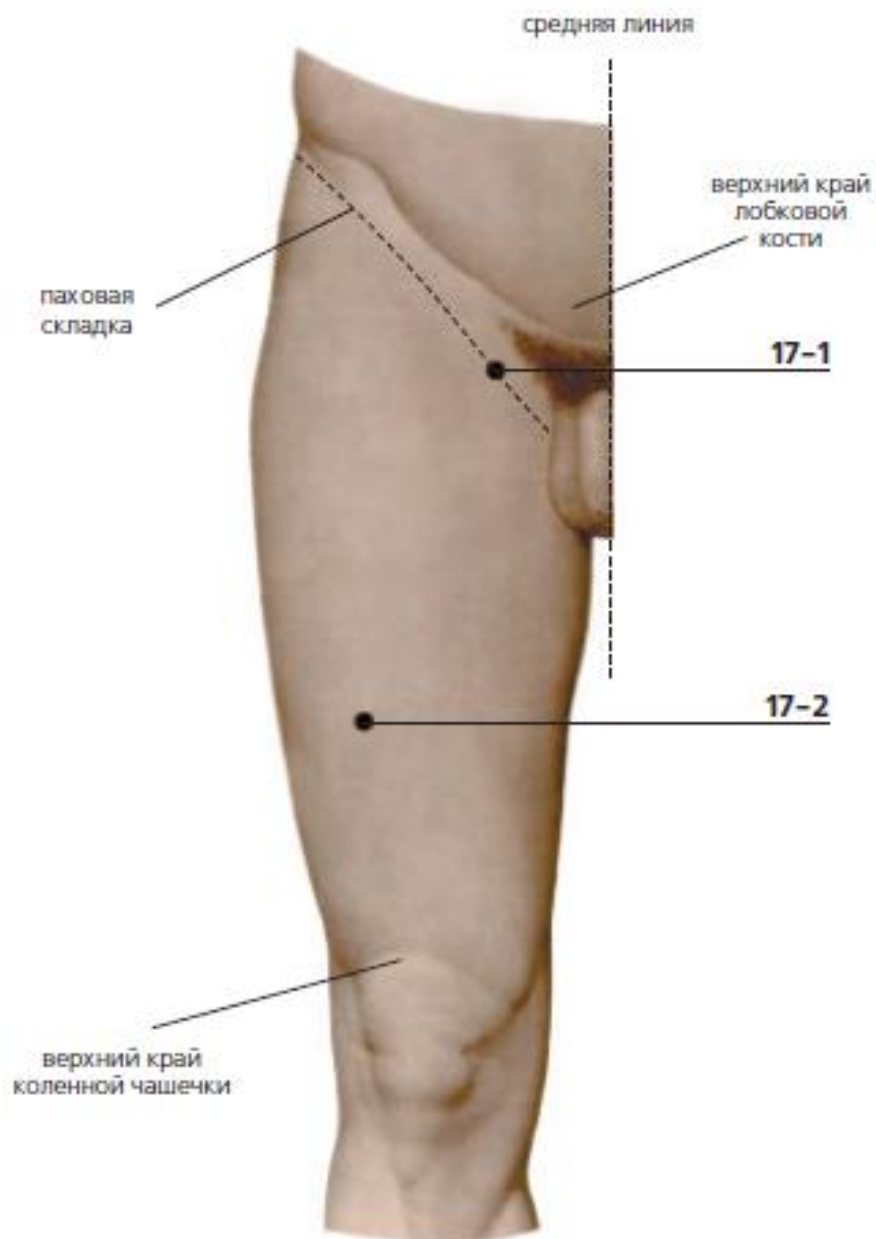


- 16-1** – 3 chon below from low margin of patella and 1 chon far from tibial crest. The area is painful on pressing.
- 16-2** – 8 chon upper from the center of lateral malleolus and 2 chon far from crest.
- 16-3** – on dorsal flexion of foot, in fossa, along the line of II toe.
- 16-4** – 1 chon upper from 16-5
- 16-5** – in the crease between second and third toes joints, in fossa
- 16-6** – on external angle of first toenail
- 16-7** – in the crease between second and third toes joints
- 16-8** – on external angle of second toenail
- 16-9** – on the crease between fourth and fifth toes joints



17-1 – 2 chon lower from upper margin of pubic bone and 2,5 chon far from midline, low part of inguinal fold

17-2 – on anterolateral side of femur, 6 chon upper from upper margin of patella. The area is detected on bent knee.



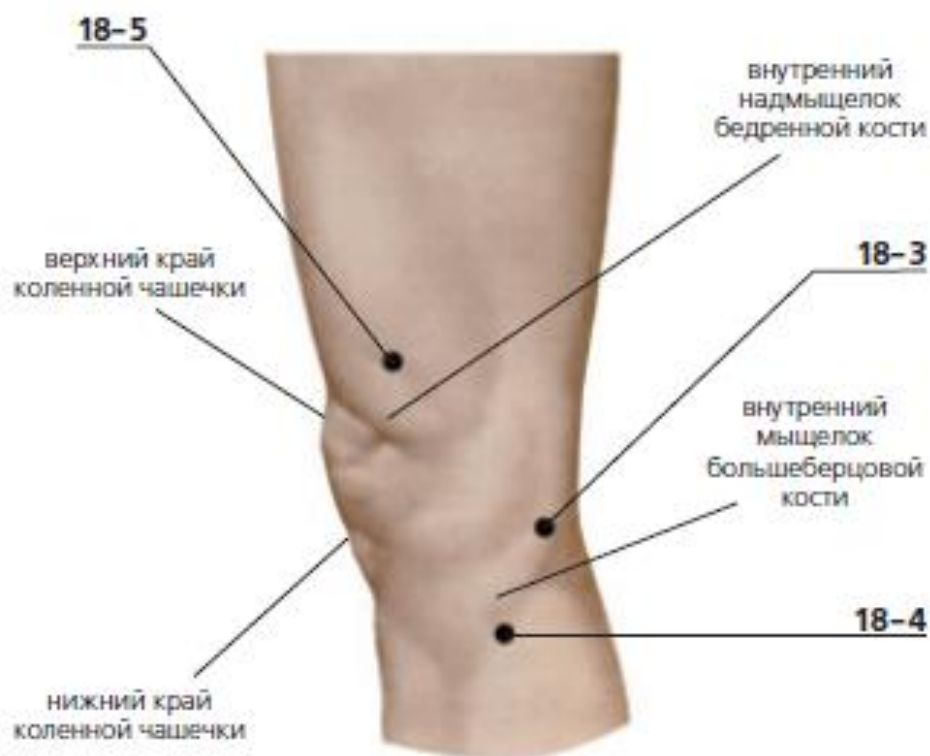
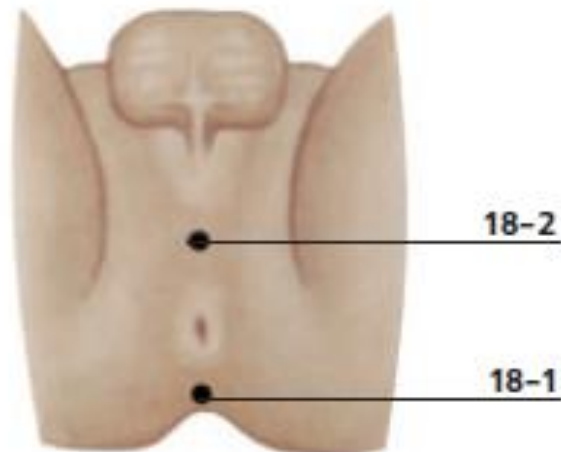
18-1 – in the middle of distance between coccyx and anus

18-2 – between genitalia and anus

18-3 – on internal surface of knee joint at the end of popliteal crease. The area is detected on bent knee. The zone is defined(determined) at the bent knee

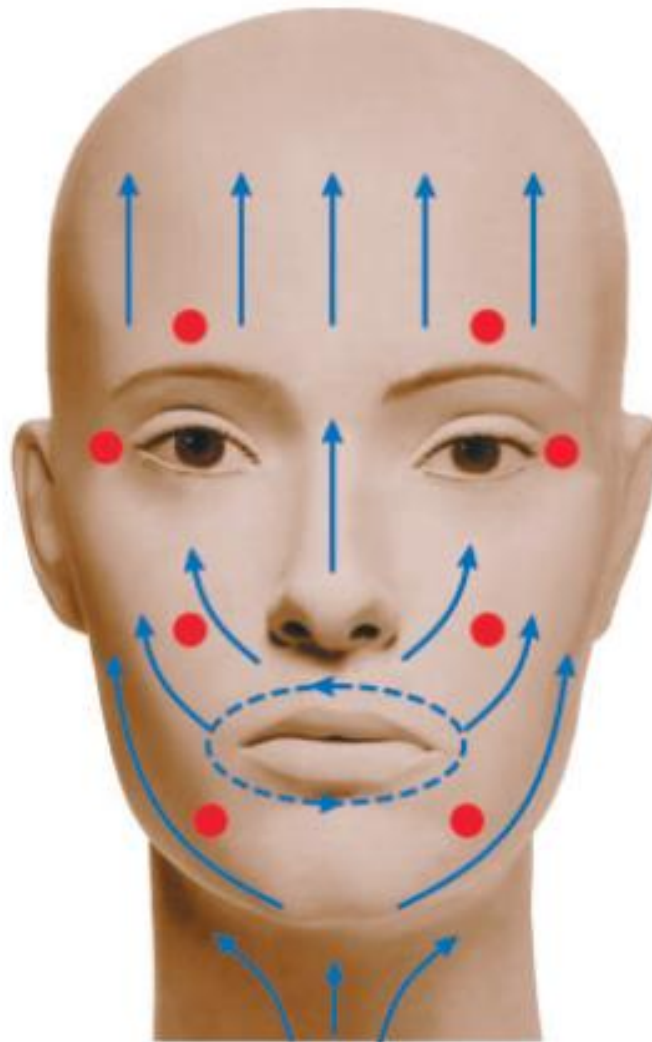
18-4 – 2 chon below low margin of patella, in fossa under bone (medial condyle of tibia). The area is detected on bent knee.

18-5 – 2 chon upper from the center of upper margin of patella and 2 chon inside, on muscle. The area is detected on bent knee.



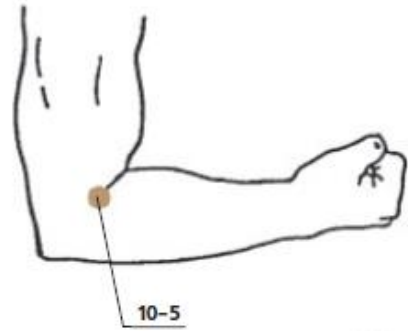
Recommended zones for electromagnetic exposure

Start to expose from “red” zones. Hold the apparatus for 2 minutes. Then continue on “blue” zones. Slowly move the apparatus under the skin involve the zones of forehead, nose, cheeks, chin. The movement should be light. Try not to tighten the skin. After therapeutic session apply skin lotion.

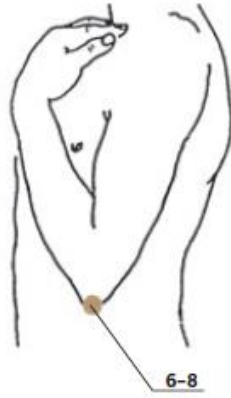




2-4



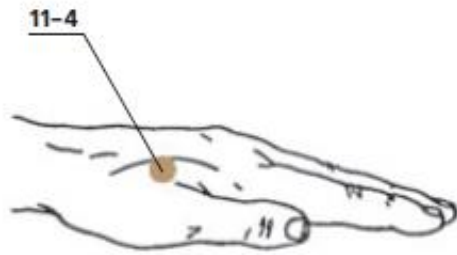
10-5



6-8



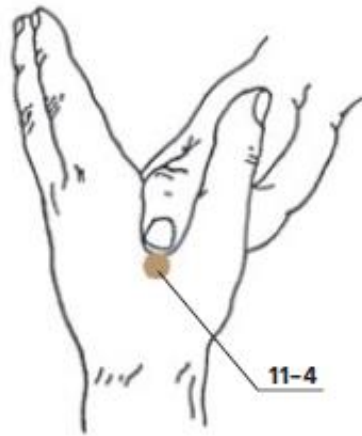
11-2



11-4



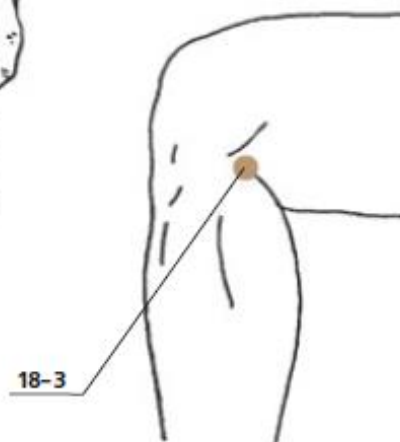
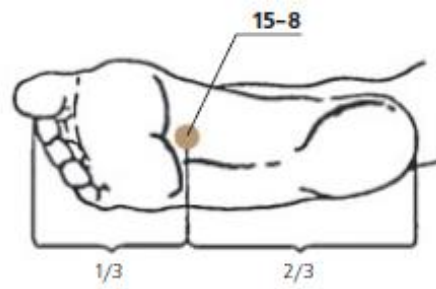
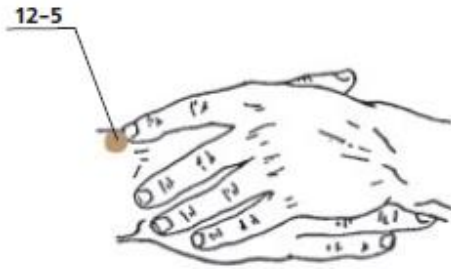
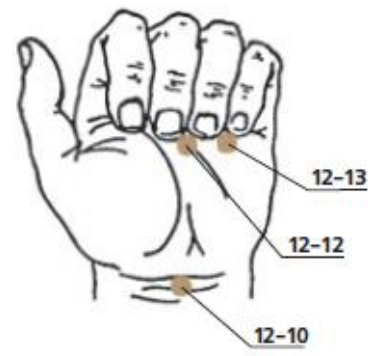
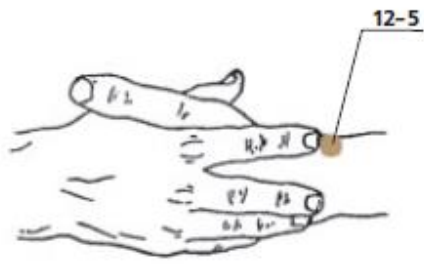
11-5



11-4



12-4



Appendix 1

The table of conformity of points of classical meridians to zones of sheets

Lung meridian

LU-2 => 5-4
LU-5 => 12-1
LU-7 => 12-5
LU-9 => 12-6
LU-11 => 12-11

Bladder meridian

BL-1=>1-4
BL-2=>1-3
BL-7=>3-2
BL-8=>3-3
BL-10=>3-7
BL-11=>8-2
BL-13=>8-5
BL-15=>8-7
BL-17=>8-8
BL-21=>9-1
BL-23=>9-3
BL-25=>9-6
BL-28=>9-8
BL-31=>9-7
BL-36=>9-11
BL-40=>14-1
BL-43=>8-6
BL-52=>9-4
BL-57=>14-3
BL-60=>13-3
BL-62=>13-4
BL-65=>13-6
BL-67=>13-7

Gall bladder meridian

GB-1=>1-7
GB-2=>4-6
GB-8=>4-2
GB-9=>4-1
GB-12=>4-8
GB-14=>1-2
GB-20=>3-6
GB-21=>8-3
GB-23=>5-10
GB-24=>6-5
GB-26=>7-1
GB-30=>9-10
GB-34=>13-1
GB-39=>13-2
GB-40=>13-5
GB-43=>16-9

Large intestine meridian

LI-1=>11-8
LI-4=> 11-4
LI-10=>10-6
LI-11=>10-5
LI-15=>10-2
LI-18=>2-5
LI-20=>1-8

Kidney meridian

KI-1=>15-8
KI-2=>15-5
KI-3=>15-3
KI-6=>15-4
KI 7=>15-2
KI-10=>14-2
KI-14=>7-5
KI-19=>6-7
KI-23=>5-7
KI-27=>5-2

Liver meridian

LR-1=>16-6
LR-2=>16-5
LR-3=>16-4
LR-8=>18-3
LR-11=>17-1
LR-13=>6-8
LR14=>6-4

Stomach meridian

ST-1=>1-6
 ST-2=>1-9
 ST-3=>2-2
 ST-5=>4-10
 ST-6=>4-9
 ST-10=>2-6
 ST-16=>5-6
 ST-17=>5-9
 ST-19=>6-3
 ST-25=>7-2
 ST-28=>7-7
 ST-30=>7-10
 ST-32=>17-2
 ST-36=>16-1
 ST-40=>16-2
 ST-41=>16-3
 ST-44=>16-7
 ST-45=>16-8

Posterior median meridian

GV-1=>18-1
 GV-2=>9-9
 GV-3=>9-5
 GV-4=>9-2
 GV-14=>8-1
 GV-16=>3-5
 GV-17=>3-4
 GV-20=>3-1
 GV-24=>1-1
 GV-26=>2-1
 GV-28=>2-7

**Spleen meridian
(pancreas)**

SP-1=>15-7
 SP-4=>15-6
 SP-6=>15-1
 SP-9=>18-4
 SP-10=>18-5
 SP-12=>7-11
 SP-17=>5-11

Pericardium

PC-1=>5-8
 PC-3=>12-2
 PC-6=>12-4
 PC-7=>12-10
 PC-8=>12-12
 PC-9=>12-14

Anterior median meridian

CV-2=>7-9
 CV-3=>7-8
 CV-4=>7-6
 CV-6=>7-4
 CV-8=>7-3
 CV-12=>6-6
 CV-14=>6-2
 CV-15=>6-1
 CV-17=>5-5
 CV-20=>5-3
 CV-22=>5-1
 CV-23=>2-4
 CV-24=>2-3

Heart meridian

HT-3=>12-3
 HT-5=>12-7
 HT-6=>12-8
 HT-7=>12-9
 HT-8=>12-13
 HT-9=>11-6

Triple energizer meridian

TE-1=>11-7
 TE-4=>11-3
 TE-5=>11-2
 TE-6=>11-1
 TE-10=>10-3
 TE-14=>10-1
 TE-17=>4-7
 TE=>4-4
 TE-20=>4-3
 TE-23=>1-5

Small intestine meridian

SI-2=>11-5
 SI-8=>10-4
 SI-14=>8-4
 SI-18=>1-10
 SI-19=>4-5

Appendix 2

The table of conformity of zones of sheets to points of classical meridians

1.1*=>GV-24**	5.4=>LU-2	9.3=>BL-23	13.1=>GB-34
1.2=>GB-14	5.5=>CV-17	9.4=>BL-52	13.2=>GB-39
1.3=>BL-2	5.6=>ST-16	9.5=>GV-3	13.3=>BL-60
1.4=>BL-1	5.7=>KI-23	9.6=>BL-25	13.4=>BL-62
1.5=>TE-23	5.8=>PC-1	9.7=>BL-31	13.5=>GB-40
1.6=>ST-1	5.9=>ST-17	9.8=>BL-28	13.6=>BL-65
1.7=>GB-1	5.10=>GB-23	9.10=>GB-30	13.7=>BL-67
1.8=>LI-20	5.11=>SP-17	9.11=>BL-36	
1.9=>ST-2			14.1=>BL-40
1.10=>SI-18	6.1=>CV-15	10.1=>TE-14	14.2=>KI-40
	6.2=>CV-14	10.2=>LI-15	14.3=>BL-57
2.1=>GV-26	6.3=>ST-19	10.3=>TE-10	
2.2=>ST-3	6.4=>LR-14	10.4=>SI-8	15.1=>SP-6
2.3=>CV-24	6.5=>GB-24	10.5=>LI-11	15.2=>KI-7
2.4=>CV-23	6.6=>CV-12	10.6=>LI-10	15.3=>KI-3
2.5=>LI-18	6.7=>KI-19		15.4=>KI-6
2.6=>ST-10	6.8=>LR-13	11.1=>TE-6	15.5=>KI-2
2.7=>GV-28		11.2=>TE-5	15.6=>SP-4
	7.1=>GB-26	11.3=>TE-4	15.7=>SP-1
3.1=>GV-20	7.2=>ST-25	11.4=>LI-4	15.8=>KI-1
3.2=>BL-7	7.3=>CV-8	11.5=>SI-2	
3.3=>BL-8	7.4=>CV-6	11.6=>HT-9	16.1=>ST-36
3.4=>GV-17	7.5=>KI-14	11.7=>TE-1	16.2=>ST-40
3.5=>GV-16	7.6=>CV-4	11.8=>LI-1	16.3=>ST-41
3.6=>GB-20	7.7=>ST-28		16.4=>LR-3
3.7=>BL-10	7.8=>CV-3	12.1=>LU-5	16.5=>LR-2
	7.9=>CV-2	12.2=>PC-3	16.6=>LR-1
4.1=>GB-9	7.10=>ST-30	12.3=>HT-3	16.7=>ST-44
4.2=>GB-8	7.11=>SP-12	12.4=>PC-6	16.8=>ST-45
4.3=>TE-20		12.5=>LU-7	16.9=>GB-43
4.4=>TE-19	8.1=>GV-14	12.6=>LU-9	
4.5=>SI-19	8.2=>BL-11	12.7=>HT-5	17.1=>LR-11
4.6=>GB-2	8.3=>GB-21	12.8=>HT-6	17.2=>ST-32
4.7=>TE-17	8.4=>SI-14	12.9=>HT-7	
4.8=>GB-12	8.5=>BL-13	12.10=>PC-7	18.1=>GV-1
4.9=>ST-6	8.6=>BL-43	12.11=>LU-11	18.2=>CV-1
4.10=>ST-5	8.7=>BL-15	12.12=>PC-8	18.3=>LR-8
	8.8=>BL-17	12.13=>HT-8	18.4=>SP-9
5.1=>CV-22		12.14=>PC-9	18.5=>SP-10
5.2=>KI-27	9.1=>BL-21		
5.3=>CV-20	9.2=>GV-4		

* - Sheet's number is the figure of expositional zones

** - Meridian's number is number of points on Gall bladder meridian

Application Instruction

for “MINITAG” apparatus of noncontact influence
with electromagnetic waves of millimetric,
infrared and visual bands on BAP

Adopted
Director of the Department
for the state control of
medical articles and
medical equipment quality,
efficiency, and safety
of the Russian Federation
Ministry of Public Health

Round seal of the Russian Federation Ministry of Public Health

R.U. Khabriev
“20” February 2001

Recommended to be adopted by the Committee for apparatus and devices applied for express-diagnostics of the organism functional state according to physiological showings of reflex zones and biologically active points and reflex therapy according to zones and BAP for new medical equipment of the MH RF (report # 3 of 19 July 1998).

1. Purpose

1.1. The MINITAG® apparatus is meant for information-and-wave therapy (IRT) of man’s homeostasis abnormalities, treatment of organs’ and systems’ diseases, rehabilitation of patients suffering from chronic diseases. It influences receptor areas, acupuncture points (BAP), wounds, and target affected skin areas. It can be applied in all types of treatment-and-prevention and health-improving institutions and at home.

2. Performance specifications

2.1. Radiated frequencies band.....	millimetric, infrared,visual
2.2. Radiation intensity, lux , at least.....	100
2.3. Maximum intensity radiation length, s	13-17
2.4. Minimum intensity radiation length, s	8-11
2.5. Ratio of minimum and maximum intensity under modulation by rectangular pulses, at least.....	1.15
2.6. Mains supply ² , V, Hz	220,50
2.7. Power consumption, VA , not more than.....	10
2.8. Operating mode starting time, s , not more than.....	20
2.9. Continuous running time, h , at least.....	8
2.10. Mass, kg , not more than.....	0.7
2.11. Dimensions – generator block, mm	208x31

² Countries with a voltage of 220 V AC and 50 Hz

- secondary power-supply source, mm	100x100x70
- power cable, m	1.6 – 1.9
2.12. Mean life error-free running time, h , at least.....	2000
2.13. Average service time, years , at least.....	5

Generator of electromagnetic noise waves creates radiation in the broad band, overlapping all possible ones, so called therapeutic frequencies used in medical EHF-devices. Besides, electromagnetic oscillations radiated by the apparatus are modulated according to the amplitude by therapeutically significant (information) signals of infrared frequencies.

3. Therapeutic action principle

It is based on the interaction of information electromagnetic radiations (IEMR) of the aforesaid bands with biologically structures of man's organism, with their information signals at the molecular, cell and organ levels. As a result of nonspecific action, the structure of the disturbed information signal in organs and systems is restored, the action of the different level pathogenic factor is reduced and (or) eliminated, secondary factors of illness development are eliminated, organism's physiological functions are normalized.

4. Indication

Due to its nonspecific action, the information-and-wave therapy method should be applied in medicine at all levels of homeostasis abnormalities:

- to treat organs' and systems' illnesses;
- for rehabilitation and treatment of chronic patients.

Clinical course, the stage (degree) of illness development, etiologic-pathogenesis polymorphism can be corrected with IRT methods in the form of monotherapy of specific diseases, also by treatment methods in specialized treatment-and-prevention institutions under combined variants of IRT application.

5. Contradictions for information-and-wave therapy application

- pains indicating the necessity of urgent surgery;
- malignant transformation until the diagnosis is clarified;
- acute abnormalities in cerebral blood flow, myocardial infarction, venous thrombosis and embolisms in acute period;
- acute psychic excitement;
- high temperature of unknown etiology;
- special danger infectious and fungus diseases.

6. Method of application and procedure for work

Treatment with IRT method shall be arranged as follows:

- the doctor specifies the treatment program and chooses the list of influenced areas for the procedure, and makes an entry to the medical record;
- the patient settles himself comfortably and relaxed in an armchair (on a couch);
- connect the MINITAG® apparatus power block to the alternating current mains with voltage of 220V (glowing indicator and oscillator prove the apparatus is ready for work);
- put the end of apparatus oscillator to the chosen (next) influenced area, the oscillator shall be placed transversely to the part of skin of 0.5 – 1.5 cm above the influenced area (contact with skin is allowed);
- the apparatus shall be fixed above the influenced area by the patient, the operator or with the help of a special device;
- after the recommended influence time is over, pass to the next area;

- duration of one procedure shall be 20 – 25 minutes for adult patients and 15 – 20 minutes for children;
- duration of influence upon one area (BAP) shall be 3 – 5 minutes;
- treatment and rehabilitation course shall consist of 7 – 10 daily procedures, the number of procedures in the acute period of the illness shall be 2 – 3 a day;
- after the procedure is over, the patient shall have a rest for 15 – 20 minutes;
- having been used by the patient, the apparatus oscillator shall be wiped with a disinfectant (72% ethyl alcohol).

7. Safety measures

For safety purposes **it is prohibited:**

- 7.1. To connect the analyzer to the main, if you have not checked whether the socket is operable, and the frame and wires are integral.
- 7.2. To use the analyzer in bathrooms and shower rooms.
- 7.3. To upset the natural heat removal of the GB body and SPSS body, and to cover them with heat-insulated objects (pillows, blankets, etc.).
- 7.4. To connect the apparatus to the main during 2 hours after it has been exposed to minus temperature.
- 7.5. Ingress of moisture inside the analyzer under desinfection and sanitization is prohibited.
- 7.6. To use the apparatus after the faults have been revealed.

8. Storage and transportation rules

- 8.1. The apparatus shall be stored in the manufacturer's outer cover in the place of use.
- 8.2. Conservation of the apparatus shall be performed in case of long-term storage or transportation.
- 8.3. Prior to conservation the apparatus shall be cleaned and dusted, the apparatus surfaces shall be degreased, first by cleaning with a swab wetted in alcohol, then with a clean soft cloth.
- 8.4. Conservation of the apparatus shall be performed in one of the recommended ways:
 - a) put the apparatus into a sack made of polyvinyl-chloride lamina, the sack opening shall be made or glued with polyethylene film with a sticky layer, placed in the manufacturer's outer cover (conservation term is 1 year);
 - b) put the apparatus into a sack made of polyvinyl-chloride lamina together with inhibitor tablets Tablin VNH-L-20, after that make or glue the sack opening with polyethylene film with a sticky layer (conservation term is 3 years).
- 8.5. The apparatus shall be transported in the manufacturer's outer cover.
- 8.6. The apparatus may be transported by all types of closed transport means, including unheated airplane bays, in accordance with the current regulations for the said transport means, the said regulations being adopted according to the established procedure. Under transportation conditions from minus 50°C to +50°C, under relative air humidity up to 95% and temperature of +30°C and lower, without moisture condensation, the total transportation term shall not exceed 1 month during 1 year after the apparatus has been shipped to the customer.
When the apparatus is transported in heated encapsulated bays, the transportation term is unlimited.

The Essentials of Informational Radiowave therapy.

High efficiency of electromagnetic radiations of millimetric range on living organism for the treatment for their normal functioning motivated the realization of the suggested method.

The method is based on interaction of electromagnetic waves of millimetric, infrared and visible ranges of low intensity modulated by informational signals of infrared frequencies, received from admittedly healthy cells of human organisms.

It is revealed that electromagnetic radiations of millimetric range interact with biologic informational structures on molecular, cellular and organic levels. It confirms that there are informational channels of interactions of electromagnetic waves with biologic systems. Biologic effects arisen in results of those interactions are shown to physiologically directed and positive for the treatment of any organ or system.

The method is based on scientifically proved hypothesis. The cells worked in normal regime with normal levels of metabolism cannot be influenced by electromagnetic waves of a millimetric range. In a sick body when the metabolism of most of cells is infringed the correction of those disorders may be performed by normalization of amplitude-frequency structure of informational signals emitted by MINITAG® apparatus.*

Actually, this correction is the autonomic correction of informational signals occurred in the results of pathologic changes in the cells. This correction is directed on the normalization of system control and the correction of infringement of metabolism in the cells.

Therefore, the law of feedback mechanism of electrophysiological and metabolic processes realizes. On exposition with MINITAG® apparatus on “sick” cells living proteins may find their original functional regime based on their “molecular memory”. Using opportunities of an electromagnetic resonance, they build this mode in the microwave spectrum, restoring thus the broken *informational homeostasis and processes of self-control*.

The term “informational homeostasis” offered for the first time by A.E.Bessonov is rather perspective for the further development of theoretical bases of information medicine.

So how the transmission of normalizing informational-radiowave signals is performed on “sick” organ or system of the body? Informational radiowave therapy is based on using traditional reflexogenic zones. The “entrance gate” to informational zones is biologic active points (BAP) and biologic active zones (BAP) used in Oriental medicine. The BAP has several effects such as analgesic, sedative and communicative. This treatment includes not just organ related to that point (meridian) but other effects the point has. In results of the experience of the clinical application of informational radiowave therapy at various diseases the semiotics of “entrance gate” were worked out on skin surface of human body. These points have local and general (integral) mechanism of action. These data are mainly used for prescribe treatment program for diseases and syndromes. They all are systematized according to main form of pathology. There are summary information received in results of many research works of authors and doctors from relevant medical centers and hospitals in that method.

The method of informational radiowave therapy applies the informational approach to the correction of general cellular mechanisms of pathogenesis. Informational radiowave therapy has broad diapason of action and effective when the correction of cellular metabolism through correction of informational homeostasis of cellular membranes is still possible. Therefore the method of informational radiowave therapy has certain possibilities and limitations.

The results received from applying of diagnostic complex “AIS LIDO” confirm the existence of informational signals and channels, informational homeostasis and processes of self-control. The application of complex gave chance to interpret and systematize the signals from BAP of known “entrance channels” of organs and system and painful areas for the first time.

* Patent of Russia Federation for invention № 2127616, priority from 03.02.98

* Patent of Russia Federation for commercial sample №46253, priority from 06.02.98

Therefore, patient may receive the authentic ‘chart’ of his/her own informational homeostasis of organs and systems of the body. The perspective advantage of the method is the possibilities of objective “watching” for the dynamics of patient condition while therapeutic sessions of informational radiowave therapy.

The description of the method.

Informational radiowave therapy (IRT) is based on the biological feedback which is realized through the interaction of the millimeter, infrared (IR) and visible portions of electromagnetic radiation (EMR), which is modulated with informational signals of the extremely low frequencies, identical to the signals from the healthy human organs with their biological structures emitting informational signals on the level of molecules, cells and organs.

The essence of the method.

The method of IRT is based on the results of theoretical, clinical and experimental studies having been performed by the authors in the following directions:

- Systems of maintenance of informational homeostasis in the human;
- Informational effect of electromagnetic radiation (EMR) of millimeter, IR and visible spectral range on the functioning of living organisms;
- Mechanisms underlying interactions of a millimeter-range EMR with living organisms;
- Conditions ensuring a maximum IRT efficiency.

In terms of chemical biophysics, homeostasis is a condition in which all processes responsible for power transformations in the body are in a state of dynamic balance. The certain conditions arise in protoplasm of cells to form spare energy and informational field in the range of extremely high frequencies (mm range).*

In terms of radiophysics the informational homeostasis is considered as a condition of a normally functioning cell in which condition an influence of external forces is minimal, i.e. a normally functioning cell has no reaction to the action of a moderate external force. (Cell functions as receiver and transmitter of signals). This condition has the greatest resource of stability and corresponds to the concept of physiological optimum. The same enzymatic reactions but “wrong” (intensive, weaken, irregular) cause the change of amplitude-frequency structure of electromagnetic field and signals** generated by the cells. It results in disturbances of informational homeostasis.

A very low electromagnetic radiation (EMR) energy employed in the MINITAG® of IRT device always produces clinical effect in the pathologically changed functional systems of the organism. Specificity of this effect and a high reproducibility of results have led to the assumption that the EMR signals are generated and used within the organism for certain biological purposes, while the external radiation only simulates the signals produced by the body itself.

The observable regular pattern of action of EMR wave of the millimeter, infrared and visible ranges of non-thermal intensity on the living bodies may be explained by the presumable fact that these kinds of radiation with certain carrying (resonant) frequencies contain some informational signals. These signals, entering the living body, fulfill some appropriate kinds of management and regulation of adaptive and restoration processes in the organism.

The effect of EMR depends in a decisive way from an initial condition of the body. If a certain organism function is weakened in comparison with norm in the initial condition, then one is able to achieve its restoration by the means of radio signals or EMR, while a healthy organism’s functioning is in no way affected by the same kind of radiation. This fact may be explained by that the main purpose of the informational signals is only the maintenance of the informational homeostasis in the living body.

* A.E.Bessonov and etc. Informational medicine. “Parus”.1999. p592.

** These signals are registered by “AIS-LIDO” which is applied in the method of “Information-radiowave diagnostic”.

The clinical application of the method of IRT is based on the possibility of normalizing the disbalanced (or distorted) informational homeostasis in the human body through the restoration of the disturbed structure of informational signals in the body organs as well as the whole body. We have to take into consideration the psychogenic condition of patient also.

A basic difference of the given method of IRT from other similar techniques lies in that the living organism is being treated not with a certain portion of EMR only, but with the whole range of millimeter, infrared and, partly, the visible waves, and in that the level of the radiating power of the MINITAG® apparatus does not exceed 1 microwatt in each frequency band in each point of the millimeter band, i.e. only low-power EMR is applied here. The whole (or nearly whole) range of waves within the aforesaid band is present in the applied radiation, with a physiologically significant information superimposed on them, being necessary for restoration of the informational homeostasis in the afflicted organs and systems. The latter fact is extremely important for the development of this treatment technique.

Indications to application

Taking into account non-specific action of the IRT this method is recommended for the homeostasis disturbances regardless of their level:

- for the primary prophylaxis in order to eliminate risk factors;
- for the treatment of the diseases of organs and systems;
- for the patient's rehabilitation on the chronic stage of the disease.

Clinical variations in the course of the disease, stage (degree) of the disease, and polymorphism of the etiopathogenesis are adjusted by the IRT used in the form of monotherapy of the specific diseases and also by combined therapy of IRT together with other therapeutic methods in the specialized medical institutions.

IRT can be combined with all other existing diagnostic, therapeutic and rehabilitation methods.

The results of the clinical trials demonstrated high therapeutic efficacy of the IRT when used for:

- *Diseases of endocrine system, digestive tract and metabolism;*
- *Psychiatric diseases and behavior disorders;*
- *Nervous diseases;*
- *Eyes diseases;*
- *Ear diseases;*
- *Cardiovascular and blood diseases;*
- *Respiratory diseases;*
- *Gastrointestinal diseases;*
- *Skin diseases;*
- *Musculoskeletal diseases;*
- *Genitourinary diseases;*
- *Pediatric diseases.*

Contraindications to application.

Contraindications to application of IRT are:

- pains indicating necessity of urgent surgery;
- malignant neoplasm, before a more precise diagnosis is made;
- strokes, myocardial infarction, venal thrombosis or emboli in acute period;
- acute mental disorders;
- a high temperature of unknown etiology;
- the most dangerous infectious and fungal diseases, before a more precise diagnosis is made.

The results of nonspecific effects of applying of MINITAG® apparatus:

Non-specific effect results in:

- *structural restoration of the distressed informational signal in organs and systems;*

- *reduction and (or) arrest of the effect of the pathogenic factor at all levels of the reaction;*
- *reduction of risk of the pathology development;*
- *elimination (decrease) of the secondary factors of the disease development;*
- *normalization of the physiological functions in the entire organism.*

Treatment with IRT method shall be arranged as follows:

- the doctor defines the treatment program and chooses the list of influenced areas for the procedure, and makes notes at the medical chart (patient may receive more reliable treatment program after informational radiowave diagnostic in “Center of Informational medicine”);
- patient seats in the armchair (lies on the couch) comfortably relaxed;
- MINITAG® power unit should be connected to the 220 V AC outlet (the device is ready for the operation if the display and emitter glow);
- the tip of the apparatus emitter adapter should be located in perpendicular over the chosen zone in contact with the skin (the dry gypsum bandage may be used between them);
- the device can be fixed over the treatment zone by the doctor, patient or with the appropriate mechanism;
- when the prescribed treatment time is over the exposure area should be changed.

Therapeutic session (treatment procedure)

The duration of therapeutic session depends on what problem is treating. To relieve the symptoms of acute disease expositional time on acupuncture point (zone) is 3-5 minutes (to relieve the symptoms: headache, fatigue, chest pain).

When IRT is used for treatment or for rehabilitation:

- 4-6 points (zones) should be used and also local painful areas;
- duration of one procedure for the adults should be 20-25 minutes, children - 15-20 minutes;
- therapeutic session of one point (zone) should take from 3 to 5 minutes;
- exposure of one point (zone) should not exceed 20 minutes;
- course of the treatment and rehabilitation consists of 7-10 daily procedures;
- treatment course of patients with chronic diseases should be 4 weeks with intervals of 2-3 days between the procedures;
- anti-recurrent treatment course consists of 5-6 procedures.

The main criterion for the correct choice of points (zones) for the treatment (without radio-wave diagnostic) is occurrence of the sensor reaction during the procedure: pleasant warmth, drowsiness, psycho-emotional comfort, decrease or relieve of the pain syndrome.

Usually test for tolerance is not required since patients tolerate informational radiowave therapy very well.

When the procedure is over the patient should have a rest during 10-20 minutes.

It should be emphasized that there is no any harmful effect of applying apparatus MINITAG®.

Possible complications after applying of informational radiowave therapy and preventive measurement and management

The informational radiowave therapy is nonspecific method of influence. The health-improving genetic reactions are registered simultaneously in all organs and systems. One of early effects of informational radiowave therapy is “rejection” of metabolic products from tissues of organs, its consolidations and excretions. This fact has to take into consideration when patient has symptoms in those organs (skin, mucous membrane of intestines, kidney, lung).

The preventive measurements include special program of therapeutic sessions. If patient has “new” symptom add more treatment sessions on the first 2-3 days, change the expositional areas (BAP). Patient should not stop the treatment course. In those cases the consultations of specialist of informational medicine is required.

Efficacy of informational radiowave therapy

Clinical study of efficacy for arresting of vertebral pain syndromes with applying apparatus MINITAG[®] has been carried out from 1993 year to 1999 year in scientific-research institute of traditional method of diagnostic and treatment in Russia.

The method of informational radiowave therapy was applied in the outpatient settings at 19535 of patients; among them 88% of patients were on nonpharmacologic treatment. And 1039 patients were treated at hospitals in combination with pharmacologic agents and 106 of patients in sanatoriums.

The efficacy of application of informational radiowave therapy in outpatients were retraced in 19535 patients; among them 66,22% (12936) are women, and 33,78% (6599) are men.

The age of patients varies:

younger than 20 years – 7,35% (1436), 21-30 years – 12,34% (2411), 31-40 years -24,92%(4868), 41-50 years – 37,12% (7251), 51-60 years – 14,14% (2762),

61-70 years – 3,46% (676), older 70 years – 0, 67% (131).

Among them patients with cardiovascular disorders – 26,8% (5235), musculoskeletal disorders – 26,2% (5118), gastrointestinal diseases – 15,9% (3106), and nervous diseases – 6,71% (1311).

The results of treatment were received at 19535 patients and estimated on generally used scheme: recovery, significant improvement, improvement, no changes, deterioration.

Generally positive results (recovery, significant improvement, improvement) of treatment were observed at 96,94% patients after using informational radiowave therapy without other treatment and pharmacologic agents. At 3,06% of patients no therapeutic effects but no one patient had any deterioration.

High percentages of good results were observed at different nosologic group of patients. Summary: with musculoskeletal disorders are 98,4% of treated patients; with gastrointestinal diseases are 97,55% of treated patients; with respiratory disorders are 91,1% of treated patients; with ENT diseases 100% of treated patients; with nervous diseases 99,6% of treated patients; with cardiovascular disorders are 97,31% of treated patients, with skin diseases are 96,97% of treated patients.

High efficiency of informational radiowave therapy is observed in separate nosology though they have a different etiology, a form and a stage of diseases.

Among musculoskeletal disorders highest efficacy in the treatment of myositis and lumbago (100%) and lower efficacy in the treatment of osteoarthritis 96,55%-98,86%. Among gastrointestinal tract diseases high efficiency in the treatment of peptic ulcer of stomach and duodenum 98,6%, chronic and acute gastritis 100%.

In respiratory disorders the results of the treatment of chronic bronchitis higher (93,9%) than of the treatment of bronchial asthma (90,76%).

The informational radiowave therapy is accompanied with general and local sensory reactions. The general sensory reactions include emotional enthusiasm, burst of energy, comfort and relaxed condition. Sleep, arterial blood pressure and pulse normalize.

The local reactions include warmth, light pricking sensation, paresthesia, pain relieves.

The application of informational radiowave therapy hastens the recovery in 1,5-2 times than other treatment methods. So scar tissue in peptic ulcer of duodenum and stomach was forming on 7-10 days of treatment on informational radiowave therapy and on pharmacologic treatment on 14-21 days.

The treatment of any disease is accompanied by normalization of functional condition of immune system and activation of white blood cells. The ratio of subpopulation of lymphocytes brings into proper correlation (the normalization of a number of T-lymphocytes doesn't affect on a number of B-lymphocytes).

The pain was relieved or reduced; the blood supply was improved on affected area. From the first minutes of therapeutic sessions the microcirculation is improved, a swelling is lessen, a number of capillaries were increased, a normalization of caliber and diameter of microvessels. The increased cellular and lipid metabolism give the favorable effects on metabolism of myocardium.

The adaptive reactions were stimulated that manifested in reducing of stress reactions and in increasing of vital activity of the body.

Disintoxicational effect of informational radiowave therapy made it possible use in oncologic patients on chemo- and radiotherapy, in the treatment of alcoholism, drug abuse, acute and chronic intoxication of chemical agents and medicines.

Informational radiowave therapy may be used to prepare body to stress situations or other environmental influences such as medicines and ionizing radiation and etc.

The high efficiency in surgical patients is of particular importance. The clinical studies were carried out in 3 groups of patients at the hospitals:

- patients with purulent wounds (after lancing of phlegmons, abscesses, furuncles, epithelial coccygeal tract, after surgery of periproctitis) – 50 patients;
- patients after clean surgical operations – 30 patients;
- patients with trophic ulcers due to vascular problems – 28 patients.

The applying of informational radiowave therapy was accompanied with:

- reducing the fever after first therapeutic session;
- reducing or relieving of pain in the wounds after surgery (analgesia is lasted 3-4 hours, later on that time was increased);
- reducing or disappearing of edema of tissues that leads to accelerating of restorative processes;
- clearing of wounds is much quicker than on using other methods of physiotherapy (rejection of purulent crust on the first 3 days of treatment);
- accelerated growth of granulations and healing of wounds from inside that results in impossibility to form fistulas;
- absence of pathologic aerobic flora after 5-6 therapeutic sessions on bacterial inoculation control (the effects are higher on exposure of open wound);
- the absence of septic complications, the peristalsis occurs on first day after surgery, i.e. on two days quicker than after applying other methods of treatment;
- accelerating of therapeutic effects on all stages of healing process of wounds in 1,5-2 times, that made use informational radiowave therapy on all stages of surgical treatment.

It results in decreasing of risk of surgery, the duration of treatment was shortening, and complications were diminished.

The method of informational radiowave therapy is applied on all stages of homeostasis infringements. It may eliminate causes of diseases. It may have special influence on affected organ, and has positive influence on body in general. Furthermore, informational radiowave therapy restores the distressed functions of immune system, improves psychological status of patients.

All clinical cases have one trait in common:

- the primary functions of all system have normalized; no one patient had any harmful effect from informational radiowave therapy;
- union of all devitalized tissues, cells, disintegration and metabolic products and its excretion;
- the received clinical effects have certain dependence of a stage of disease, syndrome and psychogenic status of patient. That is why on the treatment of early stages of disease the efficiency was higher, the recovery occurred often. There was considerable improvement when treatment starts on second stage of disease. There were emaciation and degeneration of system, there were no significant therapeutic effect on third stage of disease. Therefore the informational radiowave therapy is required to be combined with other therapeutic method on third stage of disease.

Main requirements for most effective treatment with informational radiowave therapy.

Early and distant results were investigated in outpatient and day hospitals during clinical studies.

High efficiency was noted in 90% (+9,9%; -2,5%) in different nosologic groups.

High efficiency of informational radiowave therapy is related to:

- properties of modulation signals generated by apparatus MINITAG®;
- mechanism of interaction of informational signal of low intensity with living bodies;
- availability for users of the method;
- specific effects;
- complex approach to the treatment of organism like a single whole.

The method of informational radiowave therapy may be applied for most common illnesses.

Summary of informational radiowave therapy' special properties:

- It has polytherapeutic effect; when one disease is treated the other diseases also are cured.
- It prevent the development of diseases, the transition its in chronic form, complications after surgery and pharmacologic agents.
- It provides the formation of young organism. It delays the aging processes, it prolongs the life span.
- It increases nonspecific resistance of organism to various diseases, noxious factors and radioactive agents.
- It decreases the risk of development oncologic diseases and metastasis on postoperative period.
- It increases the efficacy of pharmacologic agents and decreases it toxicity and its expenditure.
- It increases the mental and physical activity.
- It normalizes metabolic processes that improve the homeostasis indexes of patient's organism.
- It stimulates proliferative activity of bone marrow that improves blood indexes and rheogram indexes and increased the immunity of organism.
- It shortens the treatment period and enhances the quality of treatment of patients with cerebral impairment of blood circulation such as ischemic and hemorrhagic strokes and infarction of cerebri.
- It normalizes the function of hypothalamus-pituitary system that improves endocrine disorders in the organism and dysfunction of internal organs.
- It hastens the treatment period of patient after complex surgical intervention with significant loss of blood.
- It provides high therapeutic efficiency of patients of burn disease with affected skin of 20%.
- It enhances the efficiency of treatment of oncologic patients after surgery, chemo- and radiotherapy.

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 Uterine myoma 11
 Uveitis 4
 Vaginitis 11
 Varices esophageal 8
 Varicocele 11
 Varicose veins 6
 Vegetative symptoms 8
 Vegetovascular dystonia 3
 Veins varicose 6
 Ventricular extrasystoles 6
 Ventricular premature beats 6
 Ventricular tachycardia 6
 Viral hepatitis 8
 Viral myocarditis 6
 Viral rhinitis 5
 Vision fatigue 14
 Vitamin E deficiency 3
 Vitiligo 9
 Vomiting (vomiting) 8
 Vomiting 11
 Vomiting 8
 Vomiting 8
 Vomiting bilious 8
 Vomiting nervous 13
 Vomiting of nervous origin 8
 Vomiting of pregnancy 12
 Vomiting severe 8
 Vulgaris acne 14
 Vulgaris acne 9
 Watering 4
 Weakness general 11
 Whooping cough 13
 Wilson's disease 3
 Wounds 14
 Wounds operative 14
 Wrist joint pain (RA) 10
 Zoster herpes 9

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