

Using the method of vegetative resonance test and bioresonance therapy for the treatment of periodontal disease

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Periodontal disease is one of the most difficult problems in dentistry. The periodontium is constantly at the center of research; it is a complex of tissues that have a genetic and functional commonality: the gum with the periosteum, periodontium, alveolar bone and tooth tissue. The object of the study is interesting in that pathological processes occur in it for several years with exacerbations and remissions.

Based on the analysis of data from WHO (World Organization Health), collected in 35 countries, among persons aged 31–44 years in 7 countries it was noted very high (over 75%), in 13 countries - high (40–75%) and in 15 countries - moderate (less than 40%) the prevalence of periodontal disease; in the structure of which inflammatory ones predominate - gingivitis, periodontitis. Thus, the high prevalence of inflammatory periodontal diseases, significant changes in the the dentoalveolar system of the diseased, make this social problem, general medical. Periodontal disease unfavorably act on the function of digestion, psychoemotional sphere, reduce the body's resistance to the action of infectious and other factors, lead to sensitization of the patient's body.

On treatment and dispensary observation in the period from 2004 to 2005, there were 15 patients (9 women and 6 men) with a diagnosis of chronic generalized and localized periodontitis and chronic generalized and localized periodontitis in the acute stage. The patients' age ranged from 20 to 79 years.

The periodontal condition was assessed according to the following criteria:

- assessed the condition of the gums;
- assessed the degree of periodontal inflammation;
- carried out an X-ray examination;
- carried out a microbiological study;
- carried out the examination of patients by the method of vegetative resonance

test and treatment using bioresonance therapy.

Clinical examination began with the analysis of complaints, life history and medical history, X-ray examination. The periodontal condition was assessed by a number of criteria and indices.

The periodontal index (PI) according to A. Russell (1956) was determined on the based on the analysis of the state of the periodontal tissues of each tooth - the severity of gingival inflammation, tooth mobility, the depth of the periodontal pocket using a button probe (ranging from 0 to 8 points). All scores are added and divided by the number of teeth present. The results are evaluated as follows:

- 0.1-1.0 - mild periodontal pathology,
- 1.5-4.0 - average degree of periodontal pathology,
- 4.0-8.0 - severe periodontal pathology.

Gingivitis index or papillary-marginal-alveolar index (PMA) according to C. Parma (1960). The condition of the gums of each tooth was assessed after staining it with the Schiller-Pisarev solution. In this case, the inflamed areas of the gums acquire a brown color due to the presence of glycogen.

The PMA index is calculated using the formula: $PMA = \frac{\text{sum of points}}{3 \cdot \text{number of teeth}} \cdot 100\%$.

Evaluation criteria for the PMA index: 30% or less - mild severity of gingivitis;

31-60% - moderate severity; 61% and more - severe.

Bleeding index according to Milleman: $IR = \frac{\text{sum of values}}{\text{amount teeth}}$

1 - no bleeding;

2 - a drop of blood appears within 30 seconds after probing; 3 - bleeding occurs immediately after probing; 4 - spontaneous bleeding.

With radiological survey used survey and sighting radiographs.

Microbiological research to identify periodontal pathogenic bacterial flora was carried out using the technique of anaerobic cultivation (Himedia anaerostat) on 5% blood hemin agar. The material was taken from the periodontal pocket using standard sorbent paper files (No. 30), which were placed in the Venturi Transystem transport medium. Sowing on 5% blood hemin-agar was performed according to the Gold method modified by Melnikov by the sectoral method. The cultivation was carried out under anaerobic conditions (anaerostat) for 5–7 days at a temperature of 37 ° C (thermostat). Accounting for the quantitative result of the growth of colonies was carried out using a binocular magnifier ML-2B.

In our work, we used the method of bioresonance therapy for the diagnosis and treatment of periodontal diseases in the clinic and in laboratory studies.

In order to study the effect of electromagnetic oscillations on the growth and development of clinical strains of periodontal pathogenic microorganisms, in vitro studies were carried out at the Department of Microbiology of the Moscow State University of Medicine and Dentistry. Clinical strains of periodontal pathogens from a patient with periodontitis were used. From the isolated periodontopathogenic pure culture of microbes, the frequency was taken, which was inverted and recorded in a physiological solution. A clinical strain of a periodontal pathogenic microorganism was inoculated into Petri dishes according to Drygalsky (this type of inoculation made it possible to achieve a progressive decrease in the number of microorganisms and was used to illustrate the experience).

Method description: suspension of microorganisms, the corresponding a control solution by optical density, in a volume of 0.5 milliliters, was applied to Sabouraud's medium, over which it was distributed with a glass spatula; then the same spatula, without subjecting it to antiseptic treatment, was transferred to the second dish, where the inoculation was also evenly distributed over the agar surface, then in the same way the inoculation was carried out in the third and fourth dishes.

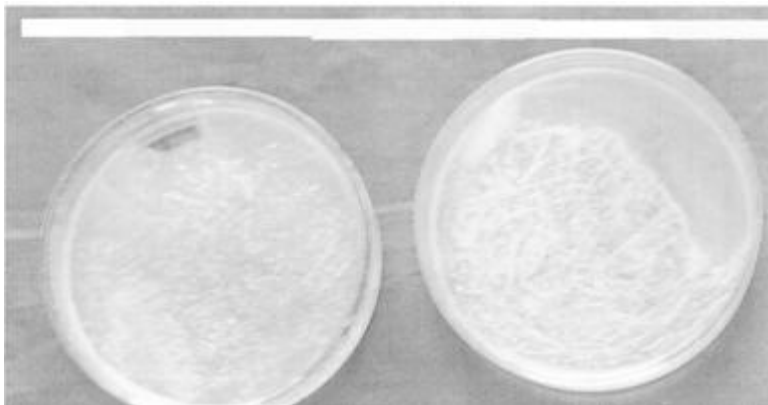
Then, sterile saline solution in a volume of 1 ml was applied to the cups with control cultures with a sterile pipette and evenly distributed throughout the entire inoculation, and sterile saline solution was applied to the test cups with a record of the inversion of the clinical strain of periodontal pathogenic microorganism, which was used for inoculation.

Evaluation of results.

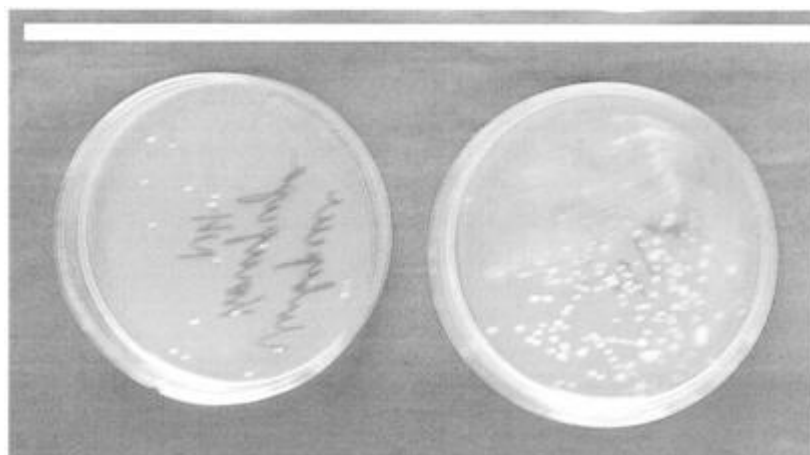
1. Continuous growth was observed in the first inverse and control plates.
2. In the second inverse dish, a decrease in the amount of microorganisms by 1/3 in comparison with the control dish.
3. In the third cups, there was a further decrease in the amount of microorganisms, moreover, in the inverted plates there were half the number of microorganisms or no growth at all, compared with the control plate.
4. In the fourth inverse dish, growth was completely absent or single colonies remained - 2, while in the control fourth dish the number of microorganisms decreased to 42 colonies.

Below is an experience with a clinical strain of *Candida albicans*.

The photographs below show a significant decrease in the number of colonies in inverted plates compared to the control.



Rice. one. In the control group, there was a significant amount of microorganisms in the third and fourth cups.



Rice. 2. Significant reduction in the number of microorganisms in the third inverse dish and to single colonies in the fourth inverse dish.

Based on the above, the influence of inverse

electromagnetic oscillations on the growth of pathogenic microorganisms.

When using bioresonance therapy, already after 10–12 days, a decrease in the amount of periodontal pathogenic microflora in the periodontal pocket was noted. The qualitative composition of the microflora of the periodontal pocket also changed, and the predominance of the resident microflora over pathogenic microorganisms was noted. From local signs, a decrease in swelling and bleeding of the gums was noted.

Patients were treated according to the following scheme. On the first visit after taking the anamnesis, material was taken from the periodontal pocket, after which testing was carried out by the method of vegetative resonance test, the frequencies were recorded on homeopathic crumbs. Then the removal of dental plaque was carried out using ultrasound on a piezon master apparatus. After 24 days of taking homeopathic grits, surgical treatment was carried out depending on the severity of the process: closed curettage, open curettage, flap surgery. After that, repeated testing was carried out, followed by therapy every other day, in the amount of 8 procedures using the device for magnetic therapy "inductor", using the APK "IMEDIS-EXPERT".

During treatment, before surgery and in the postoperative period, antibiotic therapy was not carried out. When using bioresonance therapy, there were no side effects, exacerbation of the process, and its good tolerance was noted by patients.

Re-sampling of the material was carried out 1.5 months after surgery in order to exclude trauma to the new connective tissue attachment.

As an example of the treatment of periodontitis by the method of bioresonance therapy, we give an extract from the history of the disease.

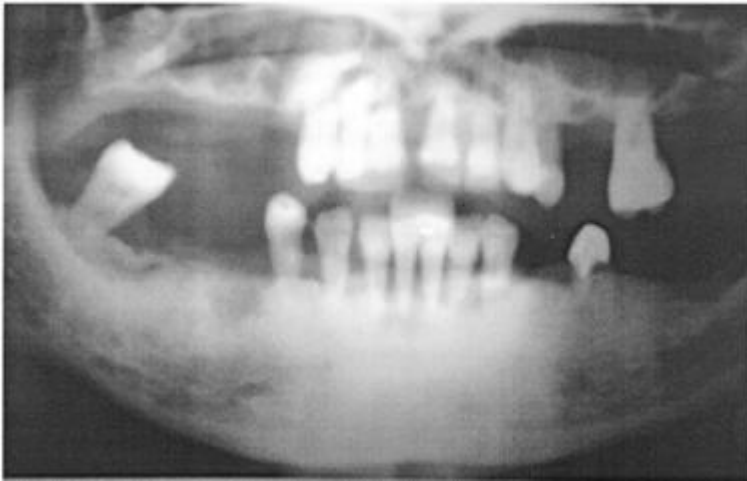
Patient M., 63 years old. She complained of partial absence of teeth in the upper and lower jaw, teeth mobility, periodic bleeding of the gums during brushing and eating, bad breath.

Past and concomitant diseases: acute respiratory infections, acute respiratory viral infections, cataracts, chronic bronchitis, gastritis, vegetative-vascular dystonia, osteochondrosis of the thoracic and cervical spine.

Locally: the teeth are preserved in the anterior region of the upper and lower jaw. The mucous membrane is edematous, hyperemia with cyanosis of the interdental and marginal gums.

Determined by soft and hard supragingival and subgingival dental deposits.

Bleeding on probing. Mobility of teeth 2 and 3 degrees. Depth of periodontal pockets: 6.5 ± 0.5 ; PMA = 100, Bleeding Index = 3.16.



Rice. 3. Orthopantomogram of patient M., 63 years old. The destruction of bone tissue is noted for 2/3 or more of the length of the roots of the teeth.

Microbiological research data:

1. Prevotella melaninogenica 1×10^7 ;
2. Actinobacillus spp. 2×10^7 ;
3. Fusobacteria 5×10^6 ;
4. Streptococcus sanguis 1×10^6 ;
5. Veillonella 8×10^6 .



Rice. 4. The photograph shows the state of the patient's periodontium upon treatment.

Removal of dental plaque and splinting of the lower jaw teeth with Glass Span was performed. The frequencies tested are recorded on homeopathic grits. The frequency and dosage of the drug were individually selected.



Rice. five. Photo of patient M., 63 years old, after removing dental plaque and taking the drug.

Microbiological examination data after 1.5 months:

1. Peptostreptococcus $2 \cdot 10^6$;
2. Streptococcus sanguis $3 \cdot 10^7$;
3. Actinobacillus spp. $3 \cdot 10^6$.

PMA = 19.2, the depth of periodontal pockets is 1.2 mm, the Milleman bleeding index = 1.

The patient underwent a flap operation using Collost collagen bioplastic material. In the postoperative period, bioresonance therapy was carried out through the device for magnetic therapy "inductor" in the amount of 9 procedures, every other day using the APC "IMEDIS-FALL".

The result of a microbiological examination 1.5 months after the operation:

1. Peptostreptococcus niger $2 \cdot 10^5$;
2. Streptococcus salivarius $1 \cdot 10^6$;
3. Fusobacterium $1 \cdot 10^4$;
4. Staphylococcus epidermalis $2 \cdot 10^4$.



Rice. 6. Photo of patient M., 63 years old after performing a patchwork

surgery and bioresonance therapy.

Nosodes for the main

periodontal pathogenic microorganisms. It is planned to further manufacture nosodes for periodontal pathogenic microorganisms, as well as directly frequencies.

Based on the foregoing, the effect of inverse electromagnetic waves on the growth of pathogenic microorganisms, and it also seems relevant to apply electropuncture methods for the diagnosis and treatment of inflammatory periodontal diseases.

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