

The use of BRT as an alternative to antibiotic chemotherapy

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Antibiotics in doses used today are often toxic not only to microbes, but also to the patient. In addition to toxic effects, they can cause allergic, including anaphylactic, reactions. In addition, the non-specificity of antibacterial drugs contributes to the destruction of the permanent microflora of the body, destroying the immune barriers. The widespread use of modern antibacterial drugs is one of the reasons for the sharp increase in diseases associated with disorders of the body's immune defense. All this makes the search for new, more specific and harmless methods of antibacterial therapy very urgent.

At present, the methods of therapy using electric and magnetic fields, electronic analogs of homeopathic preparations are becoming more and more widespread [1].

The aim of this study was to study the possibility of using carriers exposed to ultraweak alternating magnetic fields as an alternative to antibacterial chemotherapy. Clinical strains of periodontal pathogens from patients with periodontitis were used. The studies were carried out at the Department of Microbiology of the Moscow State University of Medicine and Dentistry using the apparatus for bioresonance therapy (BRT) of the firm "IMEDIS". This device allows you to isolate the frequency spectra of physiological and pathological fluctuations in the magnetic field of living organisms, fix them and, if necessary, invert them during therapy. Operating frequency range of the device

- 10-500 kHz, the intensity of the magnetic field created by the apparatus, 10-fifteen T. Algorithms and modes of BRT are selected by the operator depending on the tasks (Bioresonance therapy. Methodical recommendations of the Ministry of Health of the Russian Federation No. 2000/74).

Natural magnetic oscillations were recorded from the clinical strain of periodontopathogen, followed by inverse recording on physiological saline [2, 3]. Further, a clinical strain of a periodontopathogenic microorganism was inoculated into Petri dishes according to Drygalsky (this type of inoculation allows to achieve a progressive decrease in the number of microorganisms and was used by us for clarity of the experiment). A suspension of microorganisms in 0.5 milliliters of saline was introduced onto a nutrient medium, over which it was spread with a glass straight spatula; then the same spatula was transferred into the second dish and the procedure was repeated, then into the third and fourth cups. The control dishes were treated with pure saline, the studied

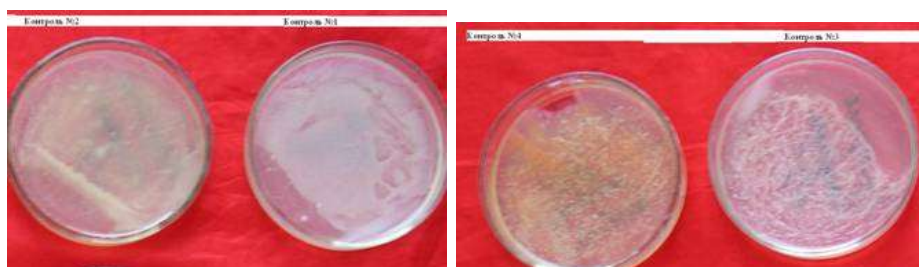
- saline solution with "recording" of inverse fluctuations of the clinical strain of periodontal pathogenic microorganism (hereinafter conventionally called an inverted cup).

Research results:

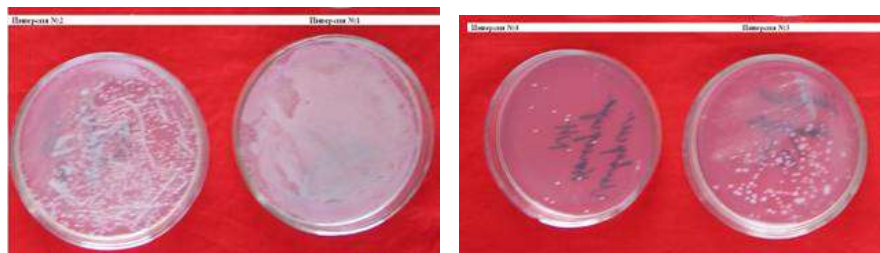
- 1) continuous growth was observed in the first inverted and control plates;
- 2) in the second inverted dish, a decrease in the number of microorganisms by 1/3 was observed in comparison with control cup;
- 3) in the third dishes, a further decrease in the number of microorganisms was observed, and in the inverse cups in comparison with control microorganisms were two times less or the growth was completely absent;
- 4) in the fourth inverse dish, growth was completely absent or single colonies remained - 2, while in on the fourth control plate, the number of microorganisms decreased to 42 colonies.

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

The photographs show a significant decrease in the number of colonies in inverted dishes compared to the control (Fig. 1, 2)



Rice. one. There is continuous growth of *Candida albicans* in the first and second plates and a moderate decrease in colonies in the third and fourth plates.



Rice. 2. Solid growth is noted *Candida albicans* in the first dish, a moderate decrease in the second and a sharp decrease in the third dish, in the fourth - single colonies.

Similar studies were carried out on material taken from 25 patients. Culture results in the fourth dish

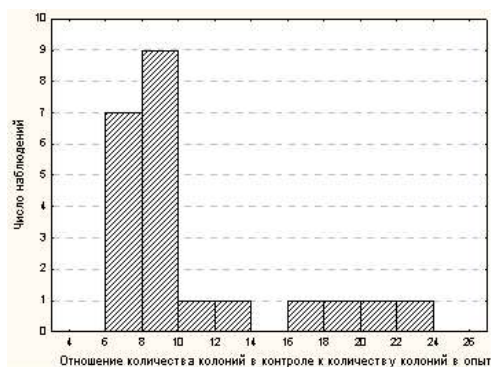
are presented in table. 1 and fig. 3. The reliability of the results was assessed by the Sign method and the Wilcoxon paired comparison method (in both cases, p <0.0001).

Table 1

Results of the crops of the culture of *Candida albicans* according to Drygalsky (explanation in the text)

No.	one	2	3	4	five	6	7	eight	nine	10	eleven	12	13
an experience	0	2	eight	2	eleven	10	3	7	five	nine	one	4	eight
cont.	34	42	64	38	83	90	53	66	40	77	24	54	78

No.	fourteen	fifteen	sixteen	17	18	nineteen	twenty	21	22	23	24	25
an experience	fifty	five	eight	10	five	58	10	4	nine	6	five	eight
cont.	fifty	44	63	87	49	58	91	31	68	53	37	88



Rice. 3. Distribution of ratios of the number of colonies grown under control conditions in relation to experience

As you can see from the table. 1 and fig. 3, the growth of *Candida albicans* in the fed group compared with the control decreases 6-24 times, which proves the detrimental effect of inverted fluctuations on the growth of microorganisms.

We also studied the effect of inverse oscillations of various pathogenic microfloras in vivo using inductors. In patients with severe chronic processes, after 10-12 days, there was a decrease in the amount of periodontal pathogenic microflora in the periodontal pocket. 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.

Thus, the studies carried out open up new possibilities in the fight against human pathogenic microorganisms.

Literature

1. Abstracts and reports of the XI International Conference "Theoretical and Clinical Aspects of bioresonance and multiresonance therapy". Part I, II. - M.: IMEDIS. - S. 436, 439.
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