

BACTERIOPHAGES AS AN ALTERNATIVE TO ANTIBIOTICS IN PERIODONTOLOGY

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High frequency and the crescent of resistance of microorganisms to antibiotics and multiple complications in their use dictate the necessity of searching for alternative tools against periodontal infection.

By microbiological data studied the impact of bacteriophages on microflora of periodontal pockets in patients with periodontitis for justify their use as alternatives to antibiotics.

The sensitivity of microflora of 36 patients to the mix bacteriophages to 19 parodontopathogens determined by spot-testing and to antibiotics - by disk diffusion method. To identify parodontopatogens used PCR and spectrometry. ANOVA was used for statistical analysis.

Antimicrobial sensitivity to the bacteriophages was found in 26 patients out of 36. At the remaining 10 ($P \leq 0,001$) have a negative results, due to the lack parodontopatogens. Antimicrobial effectivity of antibiotics in 24 of 36 patients ranged from 8 to 50% ($P \leq 0,05$); at remaining 12 people ($p \leq 0.001$) there was identified a polyvalent resistance to all antibiotics.

Results showed a high frequency of resistance of the periodontal microflora to antibiotics whereas bacteriophages were 100% effective. Those facts permit consider the use of bacteriophages in Periodontology as an alternative to antibiotics. The results demonstrates high effectiveness against parodontopathogenic.