



**ANALYSIS OF THE EFFICACY OF ANTIMICROBIALS IN
TREATMENT AND CHRONIC GENERALIZED
PERIODONTITIS**

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ABSTRACT

Despite the abundance of antibacterial drugs used in the treatment of chronic generalized periodontitis, the dilemma remains the correct choice of drug. The drug should have targeted selective action, a minimum number of side effects. This paper presents a comparative analysis of drugs Metrogyl Dent, macrolide antibiotics, penicillin and lincosamides.

Relevance: According to the WHO, the issue of the rational choice of antibiotics becomes relevant due to the growth of inflammatory periodontal diseases, which affect 55-89% of young people [3]. The rapid development of microbial resistance reduces the effectiveness of treatment. As a result, relapses of the disease and persistence of microbes often occur [11]. The most common chronic course of periodontitis. At the same time, its generalized form prevails and occurs in almost all age groups, especially in the presence of concomitant diseases. The main pathogens are obligate anaerobic bacilli, obligate anaerobic spirochetes and gram-negative cocci [8]. Comprehensive treatment of periodontitis includes the use of antibiotics. When choosing these agents, one should take into account the appropriate combination of the direct action of the drug and its side effects [9]. However, due to pharmacological variability, choosing the best drug is not so easy.

Purpose: comparative analysis of antimicrobial drugs used in the treatment of patients with chronic generalized periodontitis.

Tasks:

1. Choose the most used drug for the treatment of chronic systemic periodontitis according to the material of the study .
2. Evaluate the effectiveness of these drugs.
3. Determine the feasibility of treating periodontitis without antibiotics.

Material and methods : on the basis of clinical studies, an analysis of scientific papers covering aspects of antimicrobial therapy in patients with periodontitis was carried out .

Results : the analysis of scientific works showed that the authors of the study agree with the mandatory use of antibiotics in the treatment of the systemic form of chronic periodontitis.



However, each doctor uses different drugs and has proven their effectiveness in practice. A widely used drug is Metrogyl Denta, the effectiveness of which is due to the inclusion of two antibacterial ingredients, metranidazole and chlorhexidine [2]. It has been proven that the effect of the drug is maintained even in the presence of bodily fluids such as pus and blood. Also, the use of Metrogil Dent in patients with chronic systemic periodontitis significantly reduced the depth of the periodontal pocket [5], and according to the papillary-marginal-alveolar index, the severity of the inflammatory lesion significantly decreased [7]. Therefore, the authors argue that this drug is necessary to slow down the main mechanisms of the progression of the pathological process of chronic periodontitis, acting as an anti-inflammatory bactericidal agent [3,6,9]. This drug has no side effects [10]. Macrolide antibiotics, especially lobamycin, are also used in the complex treatment of periodontitis [4]. In an experimental study, the authors found that lobamycin in combination with orthopedic treatment affects the pathogenic flora and has an immunomodulatory effect. This drug affects platelet aggregation, thereby improving the blood supply to periodontal tissues disturbed by inflammation [12]. In the reviewed articles, several authors substantiated the use of antibiotics of the penicillin series (amoxicillin) and lincosamides (lincomycin), which have a bactericidal and bacteriostatic effect against pathogenic microflora [1,13].

Conclusions:

- 1) According to the analysis of the article, the most commonly used drug for the treatment of chronic generalized periodontitis is Metrogyl Denta ;
- 2) The effectiveness of the described drug according to the authors' clinical studies is very high, but the drugs can cause serious side effects;
- 3) Treatment of periodontitis should be comprehensive and must include antimicrobial drugs.

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