

The 10th International Medical Congress For Students And Young Doctors



## **35. INFLAMMATORY PROCESSES IN THE ORO-MAXILLOFACIAL REGION. STUDY OF ANTIBIOTICOGRAMS AND STATISTIC DATA.**

Author: Nicolaev Ana

Scientific advisor: Rusu-Radzichevici Natalia, PhD, Associate Professor, Arsenie Gutan Department of Oral-Maxillofacial Surgery and Oral Implantology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

**Introduction.** Inflammatory processes in the OMF region provide a serious risk to patients because of its proximity to the head and neck region's organs. Due to the OMF area's high vascularization, infections can spread easily, leading to serious and occasionally fatal consequences such as meningitis, thrombophlebitis, sepsis, and mediastinitis. Since the OMF region is an aesthetic area, early diagnosis and prompt surgical intervention are crucial to the patient's overall physical and psychological well-being. Only 4–10% of cases have microorganisms from non-odontogenic sources as the etiological component, while the majority of cases (90–96%) - odontogenic infection. For a considerable amount of time, the primary cause of inflammatory illnesses with an odontogenic origin was thought to be facultative anaerobic microflora, such as streptococci and staphylococci, and aerobic pyogenic microflora. Later, when new techniques for microbiological diagnosis emerged, it was determined that staphylococcus is present in 15%, streptococcus - 6%, and anaerobic bacteria - 79%.

Aim of study. Analysis of the optimal medicamentous method of treatment based on contemporary literature and antibioticogram data.

**Methods and materials.** The study included 4538 patients (2777 men and 1761 women), aged 18-90 in the period 2018-2023 with the diagnosis of inflammatory processes. The most often detected were phlegmons - 2609, followed by abscesses - 1030 and furuncles - 592 cases.

**Results.** Following the analysis of the antibioticograms the most common pathogen determined was staphylococcus epidermidis - 32.48%, followed by streptococcus group G - 18.53% and streptococcus group C - 10.69%. The basic principles of antibiotic therapy must be adhered to: selecting antibiotics based on microbiological research; optimizing dosages and administration methods; periodically substituting commonly used drugs with newly developed; continuously analyzing strains of microorganisms and their sensitivity in the hospital environment. The analysis of antibioticograms showed their sensitivity to antibiotics, so we obtained the following data: staphylococcus epidermidis sensitive to azithromycin, erythromycin, gentamicin, streptococcus group G sensitive to amoxicillin, amoxyclav, azithromycin, moxifloxacin and streptococcus group C- benzylpenicillin, amoxyclav.

**Conclusion.** The antibiotics used in dental practice, penicillins, proved to be the antibiotics most frequently prescribed by dentists; the most popular antibiotic was amoxicillin, followed by azithromycin and the combination of amoxicillin and clavulanic acid.