

**Introduction.** Acute pericoronitis is an inflammatory acute infection that appears as a complication of the eruption process of the wisdom lower teeth, that interests tissues surrounding the crown. The cause of the occurrence of pericoronaritis is the combination of the microbial and traumatic factors due to the partial eruption. Knowing the particularities of the etiology, pathogenesis and evolution of this disease as well as knowing the problems of oral microbiology is of great importance for the dentist in establishing the treatment plan and the more effective control of the infection prevention measures.

**Aim of the study.** Determination of the microbial etiological spectrum, involved in the etiology of acute pericoronaritis, for the evaluation of some pharmaceutical agents, like antibiotics, antiinflammatory drugs or their combination in the septic site elimination.

**Materials and methods.** A prospective clinical trial was conducted on 30 patients with low grade molar eruption pathology, who were referred for surgical treatment to the Dento- Alveolar Surgery Department of the University Dental Clinic nr.2 during 2017-2018. An important direction of the research was to identify the etiological spectrum of microbial agents involved in acute pericoronitis from serous or purulent collections within the 30 patient group. In our study, an antibiogram was made for every patient after collecting the secretions under the third lower molar's flap. In the laboratory was determined the sensitivity, resistance or indifference to 13 antibiotic agents.

**Results.** The results of microbiological analysis have identified positive polymicrobial cultures in 32.58% of cases and unimicrobial cultures in 67.42% of cases. Unimicrobial cultures showed the presence of Streptococci from the Viridans group. Following the antibiogram, were established that the microbial cultures identified were 100% susceptible to the following drugs: Amoxicillin, Amoxiclav, Ampicillin, Levofloxacin, Cefotaxime and Cefepim .

**Conclusions.** Considering the laboratory tests on the antibiotic susceptibility of microbial flora in the dental inflammation , penicillins (amoxicillin / amoxiclav), cephalosporins, erythromycin, clindamycin, and tetracyclines are the most useful and used antibiotics for the identified microflora.

**Key words:** pericoronitis, microorganisms, antibiogram, treatment

### 330. EFFECTIVENESS OF CAUSATIVE TOOTH EXTRACTION IN MAXILLARY SINUSITIS OF DENTAL ORIGIN

Autors: **Alexandr Mighic, Tudor Tiple, Stanislav Strisca**

Scientific adviser: Sirbu Dumitru, MD, PhD, Associate professor, Department of Oral and Maxillofacial Surgery and Oral Implantology *Arsenie Gutan*

*Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova*

**Introduction.** Odontogenic maxillary sinusitis (OMS) is an inflammatory disease caused by the spread of dental inflammation into the sinus. The rate of OMS was reported to be 25-40%. A lot of methods of treatment were proposed starting with medicine administration only, till radical sinusotomy. The question is what is the efficacy of the initial treatment, the one that includes the treatment of causal tooth only.

**Aim of the study.** The purpose of this study was to identify the factors of significance that may contribute to the results of the initial treatment of OMS.

**Materials and methods.** Twenty four patients were studied, which were divided in 2 groups, depending on the result of the treatment: effective and non-effective. Efficacy of the treatment was evaluated 3 months after causative tooth treatment with CT scan, which was compared with initial one. First group included 21 patients and the second one 3 persons, that required surgical treatment.

**Conclusions.** 1. Causal tooth treatment of OMS is an effective and miniinvasive method.

2. Maxillary ostium obstruction is an important factor to predict outcome of the treatment

**Key words:** Odontogenic maxillary sinusitis- OMS, treatment, causal tooth

### **331. THE PRACTICAL IMPORTANCE OF THE CBCT IN DIMISHING THE RISK OF OCCURRENCE OF INTRAOPERATIVE AND POSTOPERATIVE COMPLICATIONS IN ORAL AND MAXILLOFACIAL SURGICAL TREATMENT**

Authors: **Mihai Coadă, Stanislav Strisca**

Scientific adviser: Sirbu Dumitru, MD, PhD, Associate professor, Department of Oral and Maxillofacial Surgery and Oral Implantology *Arsenie Gutan*

*Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova

**Introduction.** CBCT (Cone Beam Computed Tomography) – a modern device, crucial in oral maxillofacial surgical treatment. CBCT uses X-ray beam that diverges, thus forming a cone. It is a form of X-ray computed tomography. All of these images are save in the DICOM (digital imaging and communication in medicine) format, where they are then studied and edited of special software and/or in correlation with other modern techniques, like as CAD/CAM system.

**Aimof the study.** Demonstration of the practical importance of application of CBCT (Cone Beam Computed Tomography) with the aim of prevention of intraoperative and postoperative complications in oral and maxillofacial surgery.

**Material and method:** This study was conducted in the Dental Clinic “Omni Dent” and the OMF Surgery Section of the National Scientific and Practical Centre of Emergency Medicine (CNȘMPU), where 10 clinical cases have been studied, in the process of treatment of which the CBCT was applied. Therefore, the study included examination of medical documents, multimedia files (photo, video), radiological images, medical software projects. Also, based on the obtained data, we consulted specialty literature, scientific journals and medical staff. As methods of study, we used the descriptive and analytical method and the synthesis of literature data.

**Results.** By effectuating the study, we observed that the usage of CBCT in the oral and maxillofacial surgical treatment of 10 patients allowed the precise establishment and confirmation of the diagnosis, as well as planning and monitoring of the treatment evolution without occurrence of the intraoperative and postoperative complications.

**Conclusions.** The application of CBCT is a crucial factor in the oral and maxillofacial surgical treatment, by virtue of what the doctor, with the aid of the obtained data, has the possibility of raising considerably the rate of success of the surgical intervention, by careful and thorough formation of the treatment plan and its practical application.

**Key words:** CBCT, complications, treatment, surgery, imaging

### **332. THE REASONABLE POSTOPERATIVE DRUG THERAPY OF PATIENTS WITH LOWER THIRD MOLAR IMPACTION**

Author: **Mihail Moisei**

Scientific adviser: Chele Nicolae, MD, PhD, Associate professor, Department of Oral and Maxillofacial Surgery and Oral Implantology *Arsenie Gutan*

*Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova

**Introduction.** Clinical forms of lower third molar impactions are extremely varied; generally erupt between the ages between 18 and 35 years old. In majority of cases, surgical treatment is supplemented with antimicrobial medication with the aim to reduce the risk of complications. Empirical prescribing of systemic antibiotics lead to increasing resistance of microorganisms and disruption of saprophytic microbial flora in organism.