### **292. PREOPERATIVE MANAGEMENT ASPECTS OF MEDICALLY COMPLEX PATIENTS DIAGNOSED WITH MAXILLOFACIAL INFECTIONS**

#### Author: Iulia Isacov

Scientific adviser: Levco Simion, MD, PhD, Associate professor, Department of Oral and Maxillo-facial Surgery and Oral Implantology Arsenie Gutan

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

**Introduction.** Inflammatory processes in the maxillofacial region are a pressing problem in a specialist surgeon's daily work due to the high number of patients with this diagnosis, but also because of the life-threatening complications that may occur - airway compromise, cavernous sinus thrombosis, mediastinal spread of infection, and even death. These complications occur even at "healthy" patients, with no other comorbidities. what about medically complex patients, who besides the current infection have multiple chronic diseases?

**Aim of the study.** Identify the differences in the preoperative management of medically compromised patients and review the literature to gather up-to-date solutions and protocols for the better management of various patient categories.

**Materials and methods.** A retrospective epidemiological study was conducted on 50 patients diagnosed with maxillofacial infections, who were hospitalized in the maxillofacial department of the IMSP IMU during 2015-2017 and 28 out of 50 have been found to have comorbidities.

A review of the literature was done and there were systematized protocols for each chronic condition, with an emphasis on drug interactions and possible complications.

**Results.** The research conducted confirmed the initial hypothesis that medically complex patients require a different approach while treating maxillofacial infections. Preoperative evaluation is of extreme importance and the oral surgeon should possess good clinical skills and knowledge of internal medicine, as there is a large number of patients who are unaware of their chronic medical conditions. A complete blood count, bleeding time and complete metabolic panel are crucial prior to the surgical intervention, as well as an electrocardiogram and blood pressure monitoring. Based on lab results, the operator will assess the risks and follow an individual protocol, altering the medication dosage or prescribing medication that would diminish possible surgical complications. Knowledge of drug interactions with agents used in oral surgery has been proven to be of great importance and have been systematized in this study, allowing clinicians to prevent further side effects.

**Conclusions.** Most chronic diseases have a significant impact on the evolution of maxillofacial infections and every oral surgeon should always follow individualized protocols in order to prevent complications. For a better patient care, the operative team is encouraged to request the consultation of internists in every complex case.

Key words: maxillofacial infections, comorbidities, complications, preoperative assessment

#### DEPARTMENT OF THERAPEUTIC DENTISTRY

# 293. INFLUENCE OF VARIOUS TYPES OF ODONTOPREPARATION ON MORPHOLOGICAL ORGANIZATION OF TOOTH TISSUES

#### Author: Volodymir Radchuk

Scientific adviser: Hasiuk N.V., MD, associate professor, Hasiuk P.A., MD, professor, Department of Therapeutic Dentistry

SHEI. Horbacevsky Ternopil State Medical University

**Introduction.** Due to complications in prosthetics with non-removable dentures, orthopedic treatment of teeth and dentition defects requires further improvement of non-removable prostheses' design and methods of preparation of supporting teeth. In this regard, the issues of theoretical validation of teeth preparations methods for metal-ceramic dentures make the study relevant and appropriate.

**Aim of the study.** To study the condition of dental tissues, resulting from traditional methods of preparation for cermet structures. The morphological changes in the teeth tissues should be expanded based on the outcomes.

**Materials and methods.** The material of the study served premolars, initially pre-prepared by creating a classical ledge and its symbol, covered with cermet crowns, and accordingly, divided into two groups. Thick and thin sections of these teeth were made and histochemical marking ShIK-alcian blue and hematoxylin-eosin was carried out.

**Results.** In the first group, significant blood flow disorders occured in the pulp immediately after the cermet structure was fixed onto the pre-prepared premolar with a ledge in the cervical region, some of which are irreversible in the form of hemorrhages and sludge eradication in the venules. In the second group, less significant circulatory disorders are noted in the form of stasis of capillaries and edema of connective tissue, while preserving the enamel in the cervical region with odontopreparation of premolars without a ledge.

**Conclusions.** In the first group, irreversible changes occured in the pulp, causing disturbances in neurotrophic processes in the pulp and initiate inflammatory processes. Vibration fluctuations during preparation in the tooth's neck region disorganize dentin leading to development of local angioedema disorders of the pulp. The results obtained in the second group initiate disorganization of the dentin without extension to the lateral and root parts of the dentin, while bearing a reversible character. Based on the above, the results of our research allow us to propose to preserve the odontopreparation for cermet structures to the cervical part, creating a symbol of the ledge.

Key words: teeth tissues, odontopreparation

# DEPARTMENT OF ORTHOPEDIC DENTISTRY

## 294. PRINCIPLES OF PROSTHETIC PLANNING OF FULL-IMPLANT SUPPORTED RESTORATIONS

## Author: Mihail Mostovei

Scientific adviser: Solomon Oleg, MD, PhD, Associate professor, Department of Orthopedic Dentistry

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

**Introduction.** Implant-prosthetic rehabilitation is popular and fast growing treatment care opportunity with development of new products and techniques. This offers a new possibility for patients with completely edentulous jaws to get rid of complete dentures. However, the lack of a well-defined and prosthetically driven approach may result in total failure of rehabilitation procedure.

Aim of the study. To highlight the main prosthetic element of full mouth rehabilitation on implants.

**Materials and methods**. The paper is based on analysis of medical literature and treatment of 35 patients (aged between 32 and 73 years old) with full edentulous upper and/or lower jaws using implant-supported prosthesis (39 prostheses). The patients were mainly rehabilitated with tilted implants according to all-on-4 protocol. The treatment time was divided in two parts, provisional treatment, and final one. The first one had a 6-12 months period. After treatment, seven elements