

22 molars analysed in study, have an increased risk of fracture (> 50%) of endodontic instruments and creating ledges during work in the root canal.

However, both methods have a percent of errors, which is due to buccal or oral orientation of curvature and not always can be determined by radiographically as they present 2D plans, but is still a real value, and it is useful for planning a root canal treatment.

Conclusions. Schneider and Weine's methods of radiographic analysis, proved to be easy to apply in daily endodontic practice, by allowing to elaborate an individual plan of treatment, to visualize and to outline a proper endodontic access, and to avoid complications during endodontic treatment like: separation of the instruments, perforations and formation of the ledges. These two methods of radiographic analysis are easily applicable and have a major importance in achieving a qualitative endodontic treatment.

Key words: radiographic, analysis, Schneider, Weine, methods

321. CAD/CAM IN MODERN ORTHOPEDIC DENTISTRY

Authors: **Denis Cravenco, Dmitry Kronin**

Scientific adviser: Alexandr Postolachi, MD, PhD, Associate professor, *Ilarion Postolachi*
Department of Orthopedic Dentistry

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

Introduction. CAD/CAM (Computer - aided Design, Computer - aided manufacturing) is a perspective branch of digital dentistry. The whole CAD/CAM technological process from taking impressions until fixation is performed by chairside and can take only one visit. According to polls (2016), 89% of dentists consider that CAD/CAM technology has to replace conventional process of modelling and manufacturing of prosthetic constructions in the nearest future.

Aim of the study. to analyze technological possibilities of CAD/CAM in orthopedic dentistry, to reveal advantages and disadvantages of CAD/CAM technology on the example of a clinical case.

Materials and methods. Was carried out a review of the publications of the last 10 years on the selected theme using PubMed system. According to a key phrase "CAD/CAM" 1862 publications were found, 80 publications were selected and analyzed. Research includes data from 20 publications. Examination of a patient at the age of 32 years with partial defect of solid tissues of lateral teeth of the maxilla was performed. Defect was treated with the help of zirconium crowns manufactured by means of CAD/CAM technology.

Results. The analysis of literature allowed to define the main advantages of CAD/CAM technology: 1) accuracy of marginal fit and occlusal contacts; 2) high esthetics; 3) concept of one-visit dentistry; 4) decrease of human factor; 5) stability and predictability of treatment. Presented clinical case confirms mentioned advantages of CAD/CAM technology. According to five sources, marginal discrepancy of the CAD/CAM crowns varies from 30 to 60 microns. At the same time traditional full ceramic crowns have an average discrepancy 90 microns. Researches demonstrate maintaining of 95-98% of CAD/CAM crowns for the 6-year period of clinical observation (R. Van Noort, 2012, M. Fages, 2017, Alqahtani, 2017). The analysis of literature revealed fact that rather small significance is attached to applying of CAD/CAM digital workflow in treatment of handicapped people and other categories. Possibility to minimize the number of visits for this group of patients is the greatest advantage. Were defined the following shortcomings of CAD/CAM technology: 1) high cost; 2) increased material consumption; 3) limitations in several types of prosthetic constructions.

Conclusions. 1. The analysis of literature showed that CAD/CAM the technology has large prospects in modern dentistry due to constant perfecting. 2. The quality of CAD/CAM crowns and bridges surpasses the quality of conventional constructions of the same type. However, partial and complete CAD/CAM dentures, as well as some other constructions, still have lack of precision.

Key words: CAD/CAM, zirconium crowns

322. SURGICAL TREATMENT OF MANDIBULAR FRACTURES

Author: **Doina Morohai**

Scientific adviser: Ion Dabija, MD, University assistant, Department of Maxillo-facial Surgery and Oral Implantology *Arsenie Gutan*

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

Introduction. Due to its position, shape and function, the mandible is most often exposed to trauma across the whole oro-maxilo-facial area. The mandible fractures take the first place in facial trauma, so their treatment requires a comparative analysis of all treatment methods and the choice of the optimal variant. The most common used method is conservative-orthopedic treatment, used on average in 60.86% cases. In situations when it is impossible to reduce and fix fractured fragments with orthopedic devices, the surgical method of treatment is used. As a rule, the exooral approach is used being the best visibility method, but it also has disadvantages, such as excessive trauma to tissues adjacent to fracture and prolonged healing time. To remedy these disadvantages, the method of osteosynthesis is used by endooral access, but as a treatment method it continues to be used much less frequently.

Aim of the study. To perform a comparative analysis of several sources of information on the methods of surgical treatment of mandibular fractures and their effectiveness.

Materials and methods. The research material of the statistical study comprised a group of 580 patients with mandibular fractures, female and male, aged between 20 and 89 years, which is 70.55% of viscerocranial fractures. Clinical cases were selected from 5523 records for the last three years during 2015-2017, examined, operated and treated in the Oral and Maxillofacial Surgery Department of the Emergency Medicine Institution (EMI) in Chisinau. Clinical case data have been taken from patient records in the archives (EMI) and examined using Microsoft Excel.

Results. Surgical methods were used in 227 patients, 123 surgical interventions were performed by osteosynthesis with miniplates, with exobuccal access - 69.1% and endobuccal access - 30.9%). Osteosynthesis with metallic wire was performed in 76 patients, with exobuccal approach - 73, 68% and endobuccal approach - 26.32%. In other 38 interventions, fractures were managed by combined method.

Conclusions. The mandibular fractures occupy the leading position in facial trauma due to mandible position, shape, and function. Surgical treatment using various methods of osteosynthesis was applied in 39.14% of patients with mandible fractures.

Key words: mandibular fractures, osteosynthesis, surgical treatment

323. CLINICAL EVALUATION OF PERIODONTAL STATUS IN POSTPARTUM WOMEN

Author: **Tocariuc Dorina-Petronela**

Scientific adviser: Dr. Molnar V. Claudiu Lecturer; Vlasa Alexandru, MD, PhD, University Assistant

University of Medicine and Pharmacy of Targu Mures, Romania

Introduction. Due to significant hormonal changes during pregnancy, clinical consequences can be noticed in the oral cavity, mostly in the third trimester of pregnancy and immediately after.

Aim of the study: The paper intended to demonstrate the clinical modifications of oral cavity in postpartum period, especially those of the periodontium.