

mechanical properties (wear resistance, durability); high radioopacity and very low polymerization shrinkage.

Conclusions. Dental composites are complex restorative materials, but for lasting restorations and very good aesthetic results we must rely on scientific considerations.

Key words: dental restorations, CLEARFIL AP-XEstheticsFlow, odontous lesions

316. MODEL ANALYSIS BY GERBER`S PRINCIPLE VERSUS CLASSICAL ANALYSIS

Author: **Cosmin Stan**

Scientific adviser: Dorina Cerasella Șincar, Associate professor; Gabriel Valeriu Popa, University assistant

Dunarea de Jos University, Faculty of Medicine and Pharmacy, Galati, Romania

Introduction. The model represents the exact positive copy of the total edentulous prosthetic field. The models are analyzed both separately, before mounting in the articulator, and simultaneously, as a whole, from the front and the side view after being mounted in the articulator.

Aim of the study. Total edentulousness is a dental disease becoming more common in the population. Through oral rehabilitation of total edentulous patients the aim is to reestablish the functions of the stomatognathic system: mastication, phonation, deglutition and patient physiognomy.

Materials and methods. The study was conducted over a period of 4 months, June-September 2017, on a number of 30 complete edentulous patients in Galati county, 18 patients received dentures made by the classical method of mounting the teeth of Gysi, and 12 patients received dental prosthesis made according to Gerber`s modern method of mounting the teeth.

Results. The outcomes were assessed taking into account the patient satisfaction regarding mastication, phonation, improvement of esthetic appearance and acquiring a greater comfort in wearing the denture in the case of denture wearer patients according to Gerber`s modern method of mounting the teeth.

Conclusions. The Gerber method uses teeth mounting placing the last molar before the red line and ensuring a better stability of prosthesis on the total edentulous prosthetic field. A dental prosthesis made to reproduce as accurately as possible the stomatognathic system functions and to be easily accepted by the patient, guarantees the treatment`s success.

Key words: total edentulousness, model analysis, Gerber`s method

317. THE USE OF COLLAGEN SPONGE IN SOCKET PRESERVATION

Authors: **Marina Cretu, Vlad Badan**

Scientific adviser: Andrei Mostovei, MD, PhD, Associate professor, Department of Oral and Maxillo-facial Surgery and Oral Implantology *Arsenie Guțan*

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

Introduction. Due to the development of oral implantology, socket preservation became a widely discussed theme in the professional literature. Different augmentation materials are used for it. The use of collagen sponges as a filler is considered a good alternative for socket preservation with a minimum impact upon bone formation.

Aim of the study. The aim of this study is to analyze the effect of Collagen sponge upon postextractional socket healing.

Materials and methods. A clinical study has been performed on three patients with periapical chronic inflammatory processes. All these patients were supposed to tooth extraction and

collagen sponge has been applied after antiseptic preparation of the socket. In order to maintain the sponge in the socket, X sutures has been applied. The healing process was evaluated during 3 months. Clinical and radiographical examinations were performed to appreciate the healing process.

Results. The usage of collagen sponge for socket preservation appeared to be a good support for the stabilization of the formed blood clot. No complications occurred during healing. Clinical and radiographic evaluation during healing process revealed a good integration of the sponge.

Conclusions. The usage of Collagen sponges can be considered a good alternative for socket preservation. However, in case of bone walls defects, further studies are necessary in order to assess the volume maintaining with this method.

Key words: collagen Sponge, socket preservation, tooth extraction

318. ROOT CANAL IRRIGATION DURING ENDODONTIC TREATMENT

Authors: **Cristina Boronciuc, Lucia Ciobanu**

Scientific adviser: Ciobanu Sergiu, MD, PhD, Professor, Department of odontology, periodontology and pathology

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

Introduction. Root canal irrigation aims to clean and disinfect root canal system by removing organic tissue, smear layer and microorganisms. The most commonly used irrigants are: NaOCl 0,5-5,25%, EDTA 17%, MTAD, CHX (0.2%, 1%, and 2%), citric acid (10%).

Aim of the study. To monitor over the time the effectiveness of endodontic treatment using different irrigants in combination with sonic and ultrasonic activation systems.

Materials and methods. The study was based on the treatment of 15 patients with pulpitis and periapical processes who were subjected to endodontic treatment of 9 single rooted teeth and 10 multiple rooted teeth. The irrigation protocol of pulpitis treatment entailed: 2,5%NaOCl; 17%EDTA;5,25%NaOCl; final irrigation: 5,25%NaOCl+ultrasonic activation;17%EDTA+sonic activation; distilled water; drying and filling. In the treatment of patients with periapical processes, the root canals were irrigated as follows: 5,25%NaOCl ;17% EDTA ;2%CHX, temporary filling with calcium hydroxide for 10 days. The second visit entailed removal of the temporary filling, irrigation with 17%EDTA; distilled water; 2%CHX drying and filling, X-ray.

Results. The patients were examined at 3, 6 and 12 months. The study showed that treatment by using different irrigants in combination with sonic and ultrasonic activation had a high rate of success (95-97%).

This protocol of irrigation was selected in treatment of pulpitis and periapical lesions due to the properties of each irrigant: NaOCl has bactericidal cytotoxicity, dissolves organic material, it has no effect on the smear layer. EDTA effectively removes the smear layer by chelating the inorganic components of the dentine. It does not have any antibacterial activity and does not dissolve the organic tissues. CHX has a wide antimicrobial spectrum and is effective against Gram-positive and Gram-negative bacteria, especially against *E.faecalis*.

Conclusions. Successful endodontic treatment depends on the correct use of the irrigants, respecting the consecutivity, concentration and application time of each irrigant and also a tridimensional filling of root canal.

Key words: NaOCl, EDTA, CHX

319. NURSING CARIES. INCIDENCE STUDY

Authors: **Cristina Hmelnițcaia, Lucia Avornic, Catalina Petrasco, Corina Mihailovici**

Scientific adviser: Ciumeico Igor, MD, PhD, Associate professor, Department of Maxillo-Facial Surgery, Pedodontics and Orthodontics