

## DENTAL MEDICINE SECTION

### DEPARTMENT OF ORAL AND MAXILLO-FACIAL SURGERY *ARSENIE GUTAN*

#### 361. EVALUATION OF RELATED FACTORS FOR PERMANENT TEETH EXTRACTION

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**Introduction.** Dental extraction is the process of removal of the teeth from the dental alveolus, which is situated, in the alveolar bone and it is performed for a several reasons such as: compromised teeth, symptomatic impacted wisdom teeth, teeth with caries cavity and periodontal diseases complications and teeth extracted for prosthetic or orthodontic treatment. This study aimed to determine the reasons for permanent teeth extraction and made in the University Dental Clinic nr.2, Chisinau, Moldova, in 2018.

**Aim of the study.** Revealing the primary reasons for dental extraction of permanent teeth among adults, their correlation with age, gender, oral health status.

**Materials and methods..** 169 medical records and cases of patients who underwent tooth extraction in the University Dental Clinic in 2018 were studied, revealing that 102 of them were males, 67 females, aged between 18-72. The cases were divided in groups according to four main factors for dental extraction: compromised teeth, symptomatic impacted wisdom teeth, teeth with caries cavity and periodontal diseases complications and teeth extracted for prosthetic and orthodontic treatment.

**Results.** 60,36% of the examined medical records and cases were males and 39,64% females, distributed by age groups as follows: 18- 29 years old is 24, 56%, 30- 45 years old is 35, 44%, 46-65 years old is 32%, 66 years old and more is 8%. The prevalence of teeth extraction due to complications of caries cavity and periodontal diseases is the highest among other factors which is 45,67%.

**Conclusions.** Complication of dental caries cavity and periodontal diseases were the main reasons for tooth extraction, men aged between 30-45 years old is the most affected.

**Key words:** Dental extraction, Compromised teeth.

#### 362. THE ROLE OF PLATELET- RICH FIBRIN TECHNOLOG IN ORAL WOUND HEALING

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**Introduction:** Unlike some of his counterparts in the animal kingdom, man does not have the possibility of accelerated healing and regeneration, and over the years, attempts have been made to find ways to avoid this restriction. The blood supply and growth factors are essential components in postoperative healing. Platelet-Rich Fibrin (PRF) is a relatively new concept of

natural tissue regeneration, which is widely applied in oral and maxillofacial surgery. Developed by Joseph Choukroun, in 2001, Nice, France, it was firstly used as an enhancer of tissue regeneration for patients with diabetic ulcer. Subsequently, it has spread in other areas and nowadays the PRF technique is a key-procedure in oral and plastic surgery, periodontal surgery, prosthetics, and other domains. Its' advantage consists in increased concentration of autogenous growth factors, which are spread during  $\geq 7$  days. It may be used alone or in combination with grafting materials, in order to facilitate wound healing and tissue maturation after different types of surgeries.

**Aim of the study.** The aim of this study is to analyze the effect of Platelet- Rich Fibrin (PRF) regarding specific clinical cases, in patients with different diagnosis.

**Materials and methods..** This clinical study has been performed in a series of 20 patients with different clinical diagnosis: wound dehiscence (3 patients), oro-antral communication (5 patients), mandibular cystectomy augmentation (3 patients), free gingival graft from palate (2 patients), sinus lifting procedure (4 patients), postextractional socket preservation (3 patients). These patients were treated using standard treatment protocols and the Platelet- Rich Fibrin membranes as biological seals with and without grafting materials.

**Results.** The use of PRF membranes as a biological seal after soft tissue grafting had the role of isolating the wound from the oral cavity, reducing pain syndrome by limiting the direct exposure of the wound to traumatic factors. In the case of maintaining the post-extraction socket and cystectomy using PRF membranes, the level of the alveolar ridge was maintained, and the quality of the newly formed bone was good enough for the subsequent implant insertion. An increased regeneration effect was observed after the closure of oro-antral communications of different dimensions. Moreover, the application of PRF membranes appears to promote tissue healing in case of postoperative wound dehiscence.

**Conclusions.** By strictly adhering to the protocol, the PRF can be applied in various clinical situations, and the lack of long and short-term complications denotes the positive impact of the technology on the regeneration of oral wounds.

**Key words:** Platelet- Rich Fibrin (PRF), regeneration, oro-antral communication, cyst, wound.

### **363. DETERMINATION THE EFFECTIVENESS OF THE USE OF VARIOUS GUIDED BONE REGENERATION TECHNIQUES IN IMPLANT-PROSTHETIC REHABILITATION OF PATIENTS.**

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**Introduction.** Currently, aesthetic and functional dental treatment is widely requested among patients and the demands are increasing. But very rarely when the patient has perfect conditions having often bone deficiency. Guided tissue regeneration is the process of restoring or rebuilding the lost or damaged surface with the ultimate goal of obtaining completely or partially its tissue and function. The main purpose in tissue regeneration of the bone deficient field is to provide optimal and necessary conditions for the implant-prosthetic rehabilitation of