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 ≥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.

Author: **Nicolae Schipschi**

Scientific adviser: Andrei Mostovei, PhD, Associate Professor, Department of Oral and Maxillo-facial Surgery *Arsenie Gutan, Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

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

the edentulous patient. Implant-supported prosthesis in many cases is possible only due to regenerative methods.

Aim of the study. Determination of the effectiveness of the use of bone additions with xenogenic materials and collagen membranes in comparison with autogenous grafts.

Materials and methods.. A clinical study has been performed in three patients with different types of bone atrophies. These patients were treated using xeno- and autogenous grafts, as well as with combination of the upper mentioned. In all the cases, buccal bone augmentation has been performed. The postoperative care and healing period (6 months) was evaluated for any healing events. At the end of healing, implants placement has been performed and the integration of graft as well as the quality of bony tissue were appreciated.

Results. The use of guided bone regeneration techniques provides satisfactory results under certain conditions and clinical indications. The best result was observed when using autogenic grafts and the Khoury technique. The xeno-genic material usage for GBR without being mixed with the autogenic bone graft did not give successful results due to a poor integration of graft. The usage of collagen and hydroxyapatite for contour grafting showed satisfactory result as a volume maintaining procedure.

Conclusions. The use of guided bone regeneration techniques with autogenic bone leads to a significantly higher bone quality compared to xenogenic ones. Application of guided bone regeneration technique with xenogen material can give successful results without mixing with autogenic bone only in situations of contour bone addition, in order to maintain a contour of augmented area.

Key words: bone regeneration, implant-prosthetic rehabilitation

364. SUBANTRAL SPACE - ANALYSIS OF THE APPEARANCE OF ORO-ANTRAL COMMUNICATION

Author: **Vadim Tuceac**

Scientific adviser: Sîrbu Dumitru, PhD, Associate professor, Department of Oral and Maxillo-facial Surgery *Arsenie Gutan, Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. The daily practice of the dentist is sometimes associated with accidents and complications, one of these being the oro-antral communication, with a post-extraction incidence of 80%. A major role in the etiology of the oro-antral communication is played by the thickness of the maxillary bone located between the apex of the maxillary teeth and the inferior wall of the maxillary sinus, dimension that varies depending on the age, sex and anatomy of the region. The frequency of involvement of the teeth in the production of oro-sinus communication is different and depends on the group (canine, premolars, molars).

Aim of the study. Analysis of the subantral space and the probability of involving the teeth in the production of oro-antral communication, comparing the data with those exposed in other studies.

Materials and methods.. The paraclinical study included 50 patients, 25 men and 25 women, aged between 20 and 68 years. 546 teeth with 1046 roots were investigated by performing CBCT in the dental clinic "OMNI DENT". With the help of SEDEXIS software, designed for research and analysis of DICOM data, the three-dimensional analysis of each root was performed, the measurements being made between two landmarks, in 3 planes - axial, transversal, sagittal: the first point - the closest one to the apex; second point - on the external