**Conclusions.** The usage of contour grafting in case of implants placement in posterior sides of the jaws seems to be a good method of augmentation. In case of a good periosteum, the collagen membrane isolation is not mandatory. Due to the lack of difference between one step and two steps protocol, the one step placement is more favorable because of the reduced number of surgeries and a mature biological width at the end of healing period. Further studies are necessary to appreciate indications and contraindications for such kind of augmentation.

**Key words:** implants, contour grafting

## 286. THE USE OF PLATELET- RICH FIBRIN IN ORAL SURGERY

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**Introduction.** The blood supply and growth factors are essential factors 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. Its' advantage consists in increased concentration of autogenous growth factors. It may be used alone or in combination with grafting materials, in order to facilitate wound healing, bone growth 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.

**Material and methods.** A clinical study has been performed in four patients with different clinical diagnosis: wound dehiscence, oro-antral communication, mandibular cyst, free gingival graft from palate. 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 biological seal after soft tissue grafting as well as tooth extraction with cystectomy appeared to be stable and protected the socket and grafting material during healing. The same effect was observed after closing of oro-antral communication. Furthermore, the application of PRF membranes seems to promote tissue healing in case of postoperative wound dehiscence.

**Conclusions.** The use of PRF membranes has a positive effect upon soft and hard tissue healing. Moreover, it seems to facilitate the healing process and decrease the risk of postoperative complications.

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

## 287. COMPARISON OF BONE REGENERATION IN THE EXTRACTION SOCKETS

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**Introduction.** The resorption and remodeling of alveolar ridge after tooth extraction is a natural, psysiological phenomenon, which might affect irreversibly and negatively the perspective of oral rehabilitation. Different materials have been suggested for augmentation of sockets after tooth extraction.

**Aim of the study.** The purpose of this study is to compare the regenerative properties of a biomaterial used in extraction sockets as an augmentation technique.

**Materials and methods.** The study group comprises patients who benefit from the application of platelet-rich fibrin and some of them who do not.

**Results.** It is proved that regeneration of the sockets can be achieved using a non-expensive method of augmentation and prevent the reduction of bone size in future oral rehabilitation.

**Conclusions.** The benefits of using platelet-rich fibrin are to stimulate bone regeneration, increase osteogenesis and to deal with postextractional complications.

**Key words**: augmentation, platelet-rich fibrin, extraction, socket, tooth.

## 288. IMMEDIATE IMPLANT PLACEMENT AFTER EXTRACTION

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**Introduction.** Nowadays, the implant-prosthetic treatment is a globally accepted, well-defined rehabilitation option for edentulous patients. According to the classical implantation method, the implants are installed in two stages, after the final cure of the post-operative alveolar (6-12 months after extraction). During this time, the alveolar apophysis is atrophic, especially on the vestibular side, and the implant installation becomes difficult.

Considering patient's expectations and requests for reducing the number of procedures and increasing the aesthetic results, a widely recommended procedure is the immediate implantation. A tooth extraction followed by dental implant insertion and a fixed temporary restoration has many advantages for soft tissue preservation.

This study describes the surrounding implant structures, their advantages and disadvantages, contraindications and specific features of the immediate implant placement regarding the post extraction alveolar ridge anatomical and structural elements.

**Aim of the study.** Determination of efficiency of immediate implantation versus the classic method of implantation.

**Materials and methods.** The study included 20 patients- 9 males and 11 females, aged between 27 and 60 years old, with 20 extracted teeth. The group of 20 patients was divided into 2 groups. There were 10 patients in the two-step implantation protocol group and 10 patients in one-step implantation protocol group.

**Results.** At the end of the first year, in the group of patients with the two-step implantation method, all implants had good stability, except of one lost implant at the end of the second month. We determined the loss of bone tissue of  $1.0 \pm 0.70$  mm after the radiological control. Implants in the one-step implantation group were clinically stable without mobility. Loss of bone tissue was  $0.8 \pm 0.40$  mm after 1 year.

**Conclusions**. Planned and executed correctly, immediate implant placement after extraction can offer a range of benefits, such as: reduced number of procedures, preservation of the width and height of the alveolar bone, preservation of soft tissue, obtaining an ideal location for the implant.

**Key words:** tooth extraction, bone desorption, implantation

## 289. ESTHETIC AND MORPHOFUNCTIONAL REHABILITATION OF PACIENTS WITH RADICULAR CYST

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