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

Introduction. A cyst is defined as a pathological cavity lined with epithelium and odontogenic or non-odontogenic origin, showing fluid or semi-solid contents inside. Odontogenic cysts are the most common osteolytic lesions (90% to 97% of reported cysts) in the oral region. Its growth is slow, from remnants of odontogenic epithelium of Malassez. The inflammatory cysts can be classified as: inflammatory periapical cyst (apical radicular cyst and lateral periodontal cyst or apical), residual cyst and cyst paradental. All odontogenic cysts, with the exception of inflammatory periapical cyst and lateral radicular cyst should be treated with surgical intervention. The periapical cystic lesions are usually treated by conservative endodontic treatment (periapical curettage) or surgical treatment (enucleation, marsupialization and decompression). Some inflammatory periapical cysts are reversible only with endodontic therapy. The prognosis is also good, when the inflammatory periapical cyst is removed by surgery because of periapical tissue repair occurs.
Aim of the study. The current study mainly aims to deepen the knowledge regarding the types of inflammatory odontogenic cysts, describing its characteristics and main aspects and highlighting the importance of the differential diagnosis for the treatment of these lesions.
Materials and methods. For the study were selected 499 patients with different kind of cysts in oral and maxillo-facial region in the OMF surgery department from 2010 till 2014. Among them 268 were men and 231 were women of different age.
Results. Following this study, we noticed that women are less affected than men, so it has been found that the maxilla is also more often affected than the mandible. The analysis of the treatment methods applied to the jaw cysts patients showed an increased rate of use of cystectomy (90%).
Conclusion. The inflammatory odontogenic cysts are interosseous lesions that affect the regions of maxilla and mandible. Although asymptomatic and benign, due to its continuous increases, these lesions can become destructive, because they affect and infect the adjacent bone and thus should be treated appropriately. In this sense, it is crucial for diagnosis and treatment planning usually requires a detailed analysis of the clinical, radiological and histopathological examinations.
Key words: odontogenic, inflammatory, cyst

284. THE MINIMAL-INVASIVE APROACH IN ILIAC CREST HARVESTING FOR ALVEOLAR BONE RECONSTRUCTION IN THE CONTEXT OF IMPLANT-PROSTHETIC REHABILITATION. CASE REPORT

Author: **Alexandru Ghetiu**
Scientific adviser: Dumitru Sîrbu, 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.

Background. The implant-prosthetic rehabilitation in conditions of bone atrophy supposes a bone augmentation surgery with biomaterials of various origins. The optimal mixture of grafting material is considered to be a mixture of 50/50% of autogenous and xenogenic bone. Often the necessary quantity of autogenous graft is difficult or impossible to harvest from intraoral sites. The iliac crest represents a very important bank of bone tissue for reconstructions, from quantitative and qualitative points of view. The classic method of iliac crest bone harvesting consists in making of an extended incision, of 5-7 cm, with its dissection and exposure, in order to harvest the cortico-cancelous blocks, used in the reconstruction itself or milled. This invasive method has an increased risk of complications such as pain, gait disturbance, sensitivity disorders, hernia of abdominal organs, hematoma, iliac crest fracture etc.

Aim of the study. Evaluation of minimally- invasive method of harvesting the cortico-cancelous graft from iliac crest with using cylindrical device.
Case report. The study was axed on a patient of 34 years old, who suffered an accidental fall trauma at the age of 22, resulted in avulsion of superior incisors with horizontal and vertical defect of alveolar bone. To restore the defect, a bone augmentation using GBR technique with particulated autogenic and xenogenic grafting material has been performed, in relation of 50/50%, 7 cm3 in volume. The autograft, harvested from iliac crest with minimally- invasive approach, was particulated in bone-mill. For the graft stabilization, a resorbable membrane fixed with screws was used.
Results. The wound healing in receptor site took place in conventional terms, without peculiarities, but on the donor site a faster healing and an insignificant scar formation has been noticed. The clinical and radiological examination (panoramic X-ray, CBCT) at 3 month post-operative period showed a good bone volume formation, absence of complications both on the donor and receptor sites. The advantage of the used method comparatively to the classical one consists in following: the incision line reduction, limited decolation with minimal trauma of soft tissues; directed bone graft harvesting in the inter-cortical space, that has reduced the traumatic impact on iliac crest, avoided fracture, hematoma, peritoneum perforation or abdominal organs hernia. By this way, the morbidity of donor site has been significantly reduced and allowed early rehabilitation of the patient.
Conclusions. The minimally- invasive method of iliac crest bone harvesting is easy and rapid, well-accepted by the patient and with good results and reduced morbidity.
Key words: autogenous bone, GBR- Guided Bone Regeneration, minimally- invasive

285. CONTOUR BONE AUGMENTATION IN IMPLANT-PROSTHETIC REHABILITATION

Author: **Adrian Nour**
Scientific adviser: Mostovei Andrei, MD, PhD, Associate professor, Department of Oral and Maxillo-facial Surgery and Oral Implantology *Arsenie Gutan*
Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova

Introduction. In cases of moderate lateral atrophy of the crest bone splitting, sausage technique or other grafting procedures like bone blocks are recommended. However, in case of ridge expanding, subcrestal positioning of implants is necessary while in case of bone blocks the terms of rehabilitation are longer.
Aim of the study. To evaluate the possibility of contour buccal grafting with simultaneous implants placement in one and two surgical steps.
Materials and methods. The study was performed on 5 patients in which 10 implants were installed in one and two surgical steps in the lateral sides of the jaws. Due to horizontal bone atrophy, grafting procedures were performed with simultaneous implants placement. In one case, collagen membrane was used to isolate the grafting material and non submerged technique was applied for implant. In the others, implants were installed in one and two surgical steps with grafting material (collagen and hidroxyapatite) without collagen membranes. At the end of healing, for the implants installed in two-steps, the second stage was performed and the evaluation of the grafted volume was appreciated. In cases with one step protocol, the level of buccal soft tissues was appreciated.
Results. All implants successfully integrated. In one case, solitary graft particles were observed in the soft tissues. The augmented sites shrank insignificantly, and a good profile from buccal site was observed in all the cases. No significant effect was observed in the usage of collagen membrane as well as in one or two-steps protocol.