

368. THE INCIDENCE OF APPEARANCE OF ALVEOLAR OSTEITIS USING TWO SURGICAL TECHNIQUES IN THE IMPACTED MANDIBULAR THIRD MOLARS

Author: **Victoria Ciobanu**

Scientific adviser: Gabriela Motelica, PhD, University assistant, Department of Oral and Maxillo-facial Surgery *Arsenie Gutan, Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Alveolar osteitis it is by far the most frequent painful complication of extraction. It is frequently unpredictable and without any obvious predisposing causes, but numerous possible etiological factors exist.

Aim of the study. The objective is to define the condition known as alveolar osteitis and to critically review and discuss the etiology and pathogenesis of alveolar osteitis. In addition, the incidences of alveolar osteitis following third molar surgery using two different bone cutting methods: physio-dispenser and slow speed hand piece. Also the need for elimination of risk factors as well as the preventive and symptomatic management of the condition is discussed.

Materials and methods.. Literature was selected through a search of PubMed, Embase electronic databases. The appropriate criteria of this study included the following: the patients were clearly diagnosed as having impacted mandibular third molars, the patients underwent physio-dispenser and slow speed hand piece surgeries, and the main complication was alveolar osteitis. They were divided in 2 groups according to the used technique. Most patients were recorded and investigated in a double-blinded manner, on the third and on the seven day after surgery for assessment of alveolitis.

Results. Out of 100 scientific publications that were searched, were found only 5 relevant studies that compare the rotary system with the physio-dispenser surgeries. Alveolar osteitis is considered as typical post-extraction state and 97–100% cases were reported within a week of extraction. The summary of these indicate post-operative sequelae were insignificant in slow speed hand piece group. Beside the mode of cutting the bone the flap design, bone depth, irrigation during procedure, and medication; also play a major role in causing AO.

Conclusions. In the current prospective study, was concluded that alveolar osteitis was not observed in the slow speed hand piece group, and was more effective with no complications as compared with physio-dispenser.

Key words: Alveolar osteitis, Dental extraction, Surgical technique

369. RADIOLOGICAL ASPECTS OF MAXILLARY BONE MORPHOLOGY IN PATIENTS WITH OSTEOPOROSIS

Author: **Chiril Voloc**

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. Osteoporosis is a common systemic disease of the skeleton, characterized by low bone mass and disturbances in the microarchitecture of bone tissue, which leads to increased fragility of bones and the risk of fractures. Osteoporosis on the radiologic image is characterized by an increased transparency of bone tissue and other signs, depending on the

degree and duration of the dystrophic process. To evaluate the morphology of the inferior cortex in panoramic radiographs according to the classification of Klemetti.

Aim of the study. Evaluation of radiological image of maxillary bone morphology in patients with osteoporosis.

Materials and methods.. Study of a group of 32 patients with osteoporosis treated in the “Omni Dent” dental clinic. The age of the patients - from 18 to 71 years. Evaluation of radiographic indices of osteopenia/osteoporosis according to Klemetti, based on radiological examination on OPG and CT 3D correlated with DEXA. The information from OPG and CT 3D was processed on the available equipment software (Sirona Sidexis 4.0). Were analyzed the following radiological aspects of maxillary bone: the appearance of glomerular picture where it was not; thinning of the cortical layer; expansion of the medullar space; spongiosis of the cortical layer; emphasized contours of the bone in severe osteoporosis.

Results. Patients were divided into 3 study groups by age: group I (35-44); group II (45-54); group III (≥ 55 years of age). We have observed a dependence between the age group and the radiological changes of the bone microarchitecture. This phenomenon is confirmed by a strong direct correlation between the age and the degree of osteoporosis ($r_{xy}=0.676$, $p < 0.001$). By comparing the OPG data with the osteodensitometric data we determined that the Klemetti method has a rate of 82.5 % statistical accuracy.

Conclusions. The examination using the DEXA, OPG and CT 3D allows establishing an accurate, clear and correct diagnosis, as well as choosing a safe treatment plan acceptable in each clinical case. The obtained result allows us to consider the Klemetti classification as a sufficient method for early diagnosis of suspected osteopenia/osteoporosis, and the obtained information can be used in subsequent prosthetic implant rehabilitation planning.

Key words: maxillary bone, osteoporosis, radiological examination

370. REGENERATIVE THERAPY USING THE PRP TECHNIQUE IN LOWER WISDOM TEETH POSTEXTRACTIONAL WOUND REGENERATION

Author: **Iulia Bunduchi**

Scientific adviser: Motelica Gabriela, PhD, University assistant, Department of Oral and Maxillo-facial Surgery *Arsenie Gutan, Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Regenerative therapy is based on the supply of growth factors and bioactive proteins to the damaged sites in order to restore the integrity and function of the tissues, thus improving the patient's health. Postextractional wound healing and maintaining bone tissue level can be accomplished by postextractional defects augmentation, but a method for stimulating regenerative processes of peridental tissues is the injection of thrombocyte autoplasm immediately postextractional. In the contemporary dental-alveolar surgery, the number of patients requiring complex treatment associated with the eruption pathologies of the third molars has increased significantly. The complications caused by the impacted wisdom teeth are of particular importance for the dentist, both through the clinical and therapeutic problems they raise and by the fact that they occur frequently in young people.

Aim of the study. Determining the effectiveness of the PRP in the regeneration of the postextractional socket of the lower third molar.