

**O.301 The use of tapered dental implants in severe jaw atrophies**

D. Bertossi, G. Bissoletti, G. Corrocher, A. Anesi, P.-F. Nocini. *Section of Oral and Maxillo-facial surgery University of Verona, Verona, Italy*

**Objective:** To evaluate the use of tapered implants in combination with piezosurgical split-crest technique in severe atrophy of jaws.

**Methods:** We selected 10 patients (age 45–58) presenting grade 4 to 5 class by Cawood and Howell of jaws. Those underwent piezosurgical split-crest technique and simultaneous tapered implants surgery. Pre-operative x-ray evaluation included standard x-panoramic and CT Dental-scan. Standard chemoprophylaxis was administered to each patient. The piezosurgical split-crest procedure was combined with alloplastic bone substitutes and double-layer membrane to improve the thickness of alveolar bone and simultaneous implant surgery. Every patient received from 3 to 6 with tapered screws which diameter was 3.75 mm and length 10–11.5 at 3 months from the first procedure.

**Results:** Patients were monitored clinically and marginal bone changes were calculated utilizing periapical radiographs taken at placement and at subsequent appointments utilizing a standardized paralleling device and a 1-mm measurement grid for marginal bone remodeling at baseline and after 3 months within loading. Cumulative implant survival was 98.4% (n=65). Mean marginal bone resorption (SD) was 1.19 (1.01) mm for the early loading group after 1 year. The use of tapered implants seem to reduce peak stress in both cortical and trabecular bone.

**Discussion:** the use of tapered implants was revealed ideal in patients presenting atrophy of jaws. The taped designs show an ability to dissipate the interfacial stresses of bone, therefore improving the stability and the osteointegration if used in association to split crest made with piezosurgical device.

**O.302 Treatment features of patients with osteoradionecrosis**

O. Titova, V.V. Afanasiev, A.V. Shchipskiy. *Moskow State University of Medicine and Dentistry, Moscow, Russia*

**Objectives:** To find the effectiveness of our treatment of patients with Osteoradionecrosis (ORN).

**Methods:** Our group consisted of 14 patients with ORN – 12 of them on mandible and 2 on maxilla. Age was from 41 to 76 years. Treatment time was from 6 to 24 months. Patients received radiation therapy dose from 60 Gy to 91 Gy. In all patients ORN showed up after teeth extraction in different time after radiation therapy treatment. All patients got complex treatment, including purulent fistulae preparation in bone and soft tissues, anti-inflammatory, stimulating and symptomatic therapy. Wound redressing was done 2–3 times in a week. Antiseptic solutions were taken through fistulae. Wounds have been cleansed with “Alvogyl” paste and unguentum “Laevomecoli”. 7 patients got mandible fracture because of osteomyelitis. General treatment of 5 patients included long time disintoxication therapy which included of 7–10 intravenous injections of 400 ml solutions of “Rheopolyglucini” and “Haemodesi”. Also patients got vitamins, and balanced diet which included enough amount of proteins, fat and carbohydrates.

**Results:** Full recovery was determined in 4 patients. Other 4 patients died because of metastatic disease and recurrent tumor. In other 6 patients we have determined process stabilization but there was no full detachment of sequestrum.

**Conclusions:** Radiation osteomyelitis most often involve mandible. ORN is a long-acting disease, with slow buildup of demarcation line. The longtime use of disintoxication therapy result in patient condition improvement thus resulting sequestrum detachment.

**O.303 Treatment problems in the patient affected with myopathy**

P. Arkuszewski, M. Kozakiewicz, A. Przygonski, M. Tyndorf. *Dep. Cranio-Maxillofacial and Oncological Surg., Lodz, Poland*

Patients affected with myopathy are important post operative problem due to complications-malignant hyperthermy and respiratory insufficiency.

The authors present a patient, who was referred to Department of Cranio-Maxillofacial and Oncological Surgery in Lodz. In the patient with generalised muscle weakness with significantly decreasing of diameter of the isthmus faucium and posterior part of oral cavity and malocclusion due to myopathy, aspiration of food to the larynx happened. Respiratory and circulatory arrest were the consequence of this accident. Tracheotomy was performed and vital function was reappeared.

Up to now this 21 y.o. male was not diagnosed the basic disease. To establish diagnosis EMG and skeletal muscle biopsy were performed. Histopathologic examination made possible the myopathy to be diagnosed. That was essential value for anaesthesiological management. And only then the decision of surgery can be undertaken.

**O.304 Vestibuloplasty with posttraumatic scary mucous changes**

A. Shchipskiy, D.S. Shinkevitch, V.A. Hripunkov. *Moskow State University of Medicine and Dentistry, Moscow, Russia*

Having ablated posttraumatic cicatricial mucous membrane changes of aged patients' vestibule of mouth the recurring cicatrization of tissues is to be avoided and proper conditions to fix the removable prosthesis should be made. Our method of vestibuloplasty permits to do it.

**Methods:** Our vestibuloplasty method using pure silicones much differs from the Bessho K. et al. method (1998), which uses the silicones with collagen.

The 15 patients' postsurgical vestibule of mouth tissues defect was isolated with a silicon membrane. The vestibule of mouth was formed by a silicon roll put on the membrane and fixed by transcuteaneous suture. The complex was removed in about two weeks after the operation. Then the patient used a forming prosthesis. The observation period was three years long.

**Results:** The silicon roll lets us form the vestibule of mouth in all cases. The abilities of the method were limited only by the jaw atrophy degree. The membrane isolated the wound and prevented from developing of deforming scars. The dressing didn't prevent the wound from epithelization and could be removed afterwards. The state of the wound was observed through transparent silicones. By the indications “under membrane” space was used as a drug “shed”. After the removing of the complex and using the forming prosthesis stability of the formed vestibule of mouth and proper conditions for the removable denture were noted.

In connection with the considerable wound area ( $1210.0 \pm 534.3$  square millimeters) the low cost of the silicones is at significant advantage in comparison with other materials.

**Conclusion:** The vestibuloplasty method using the silicon complex is an effective way of pre-prosthetic surgical preparing of the patients with mucous membrane cicatricial changes of vestibule of mouth. The vestibuloplasty method is adaptive, result predicting and may be used in outpatient practice independent on the cicatricial changes intensity.