Maxillar Prognathism: A New Surgical Method

Vasiluta I.

Department of Oral and Maxillofacial Surgery, Timisoara, Romania

On the basis of our casuistics, a new surgical method in the treatment of some particular cases of maxillar prognathism, difficult to be resolved through usual methods, is proposed. Essentially, this method consists in a mediosagital osteotomy, which permits the increase of the prognathous superior arcade and a perfect integration of this over the inferior arcade. Also, the inclination of the osteotomised plane to palate in an obtuse angle, permits the correction of the superior occlusal plane.

Report of Case with Rare Median Cleft of Upper Lip, Alveolar Ridge and Palate

Vaskov I., Naumovski S., Popovic D.

Clinic of Maxillofacial Surgery, University St Cyril and Metodius, Skopje, Macedonia

Report of a case with rare median cleft of upper lip alveolar ridge and palate According to our data, in the Republic of Macedonia, out of 1000 newborn children one is born with cleft lip or palate. These anomalies have been successfully treated over a 30-year period using operative techniques accepted in other European countries. We have performed surgical interventions on more than 800 children. On this occasion we would like to present one very rare case of median cleft of the upper lip with aplasia of premaxilla and nasal septum.

Densitometric Analysis of Mandibular Fractures. Preliminary Study.

Villarreal P.M., Junquera L.M., Martinez-Nistal A., Albertos J.M., Lopez-Arranz S.L.

Department of Oral and Maxillofacial Surgery, Central Hospital Oviedo, Oviedo, Spain

Introduction: Rigid internal fixation (RIP) has been a great advance in facial trauma. Although indications and advantages are well-known, intermaxillary fixation (IMF) is still used. Nowadays, the evolution of the mandibular fractures is studied by panoramic radiographs, nevertheless the human eye has not enough capacity to discriminate minor changes in bone mass.

Objective: To determine by densitometric analysis the bone mass changes produced in bone healing (RIP versus IMF).

Materials and Methods: Ten patients treated in the Central Hospital of Asturias for mandibular fractures were analysed: 5 were treated with IMF and 5 cases with RIP (AO/ASIF system). We used the panoramic radiographs at the postoperative period, and 15, 39, 60 and 90 days postoperatively; using the CADIA system (computer assisted densitometric image analysis). Statistical analysis (Systat 5.0; Student's test).

Results: We obtained representative values of bone mineral augmentation in all radiographic controls except at the 30 days postoperative period. The patients treated with RIP presented a high speed mineralization index and bone mass augmentation, but only statistical differences were observed at 15 and 30 days ($P = 0.031$).

Moving of the Fragments of the Mandible during the Sagital Split Osteotomy: Cephalometric Interpretation

Vukadinoc M.

Clinic for Maxillofacial Surgery, Faculty of Dentistry, Belgrade, Yugoslavia

The changes of the skeletal structures after surgical correction of mandibular prognathism were analysed in 115 patients (71 female and 44 male) by the means of cephalometry. In these patients, the correction was made following the principles of sagital split osteotomy. Sixteen angular and 2 linear measurements were taken from pre- and postsurgical cephalogramic radiographs. All the changes of these measurements were tested through parametric and nonparametric statistical tests. Cephalometric variables, or better to say, their changes, were observed in groups which were made on the base of information that they give about the movements of the medial and distal fragments of the mandible. Thanks to the corrections made, the medial and distal fragments begin to move, in a very complex way, and to interact with each other. At the same time the medial fragment is moved (transversely) backwards, translatorily with a minimal rotation, and the distal fragments perform rotational movements with the centre in the corresponding tempomandibular joint.

Reconstruction of Defects Caused by Surgical Removal of the Labial Commissure Tumours following the Principles of the Fries Method

Vukadinoc M.

Clinic for Maxillofacial Surgery, Faculty of Dentistry, Belgrade, Yugoslavia

At the Clinic for Maxillo-facial Surgery in Belgrade, 89 patients with labial tumours were operated on, using the Fries method, in the period from 1991 to 1994. In 7 patients, the tumour was located in the area of the labial commissure. Here are the results of the reconstruction in 3 patients. According to our clinical experiences, so far, we can say that an aesthetical result can be achieved and that this method can be highly recommended for the reconstruction of the big defects of the labial commissure.

Surgical Removal of Lower Third Molars after Computed Tomography

Warnke T., Carls F.R., Sailer H.F.

Department of Cranio-Maxillofacial Surgery, University Hospital Zürich, Zürich, Switzerland

The surgical removal of impacted lower third molars might be complicated by hypaesthesia of the lower alveolar nerve due to the vicinity of these two anatomical structures. In 86 patients with projection of the roots of the wisdom teeth onto the mandibular canal in the panoramic radiograph, preoperative coronal computed tomography (CT) was performed. This group was compared to a control group consisting of 24 patients (with 38 similarly situated lower third molars) without preoperative CT. In the first group (with CT), 11 patients (13%) showed reversible hyposensibility of the lower alveolar nerve, in the second (without CT) we

found this complication in 8 cases (21%). We conclude from these results that in patients with projection of the roots of the lower third molars onto the mandibular canal, CT scanning can help to avoid sensibility disturbances of the lower alveolar nerve.

The Relationship between the Gene Expression of Interleukin-2 and the Distribution of Fibronectin in Oral Squamous Cell Carcinoma

Watanabe H., Satomi T., Kaneko T., Chiba H.

Department of Oral and Maxillofacial Surgery, Tokyo Medical College, Tokyo, Japan

In vitro, fibronectin (FN) induces AP-1, which is the nuclear internal transcript factor, via VLA-5 on the T cells and enhances synthesis of interleukin-2 (IL-2) by joint work with the signal through TCR/CD3. Therefore, it is thought that activation and proliferation of the T cells are induced by FN. In order to elucidate whether the signal of IL-2 mRNA was enhanced by FN existing in cancer tissues, the intensity of the signal of IL-2 mRNA, the distribution of FN and the number of cytotoxic T cells (CTL) infiltrating into cancer tissue were investigated by in situ hybridization, immunohistochemical staining and an image analysis device in 30 cases of oral squamous cell carcinoma prior to treatment. Fibronectin stain-positive cases (pFN) showed more eminent CTL infiltration, more strong expressing of IL-2 mRNA as compared to FN stain-negative cases (nFN), suggesting that a biological effect of FN to activate T cells appeared in pFN. On the other hand, as regards to nFN, it was considered that nFN lacked enough local factors to activate T cells, and this would be one of the reasons for the difficulty in forming immunity against cancer cells and the lower effectiveness of various types of immunotherapy for cancer.

Ramifications of the Changing Health Delivery Systems in the USA

Waugh R.B.

Oral and Maxillofacial Surgery, Lancaster, California, USA

The effects on the patient, physician, hospital, employer, insurance companies, physician, education and medical research are discussed. Fee for service has largely been replaced with managed care. Patients have a mixed situation. Costs are minimized but it is a long process to receive authorization for treatment, if approved. The pattern indicates that, if the cost of treatment is considerable, most likely, the authorization is denied. Physicians no longer control their practices. Patients' health issues are now controlled by the Health Maintenance Organizations (HMO) and insurance companies. It appears that the main concerns of the industries mentioned are increased profits at the expense of the patient, physician, and the hospitals. The doctor and hospital must work at reduced fees in order to treat patients associated with HMOs and managed care. Otherwise, they will have no patients to treat. The employer is benefited by lower costs. The insurance companies and HMOs are exploiting the doctor, hospitals and patients and are exceedingly wealthy. In addition, the parsimonious policy is adversely affecting physician education and research.

Prevention of Surgical Wound Infection in Craniomaxillofacial Surgery with Macrodose of Clyndamicin plus Gentamycin

Yanze Vilas J.I., Garcia C.J.

Department of Maxillofacial Surgery, Regional Hospital Carlos Haya, Malaga, Spain

In a comparative study with 454 patients and three different antibiotics with a global surgical wound infection (SWI) of 12.86%, the only statistically significant chemoprophylaxis regimen was the single Macrodose with 1,200 mg of clyndamicin + 120 mg of gentamycin (3.52% SWI), versus penicillin (19.25%) and the 2 day form of administration of clyndamicin and gentamycin (12.86%). Other significant factors evaluated were the preoperative stay in the hospital, type of surgery (more than 50% of clean-contaminated operations in this Department of Maxillofacial Surgery) and duration of the surgical procedure.

Surgical Treatment of Post-Traumatic Deformities

Yanze Vilas J.I., Garcia C.J.

Department of Maxillofacial Surgery, Regional Hospital Carlos Haya, Malaga, Spain

The surgical treatment of these patients requires a craniofacial conception. Three cases are presented with more than 2 years of postoperative course: 1. Orbital dystopia. 2. Fronto-orbital displacement. 3. Maxillomalar fracture incorrectly treated with diplopia and enophatalmos. Refracturation and monocortical fixation in combination with cranial bone grafts are basic principles that get good long-term results.

The Evaluation of Upper Airway Space in the Young Turkish Population

Yücel E.[1], Eroglu E.[2], Türk T.[2], Saracgil S.[1]

Departments of [1]Oral and Maxillofacial Surgery and [2]Orthodontics, Faculty of Dentistry, Gazi University, Ankara, Turkey

Cephalometric analyses have been used to evaluate the nasopharynx and adenoid tissue pads. In these studies, evaluating the nasopharynx and adenoid tissue pads, different methods of measurement and samples displaying different characteristics have been used. However, studies evaluating the different levels of the upper airway are almost nonexistent. The aim of this present study was to evaluate upper airway space in young Turkish subjects without facial deformity or obstructive sleep apnea syndrome. In this study, lateral cephalometric radiographs were taken from 77 subjects, 39 females and 38 males, with the head in a natural position. In order to evaluate the different levels of upper airway space, linear measurements were used. The differences between the sexes were tested by student t test. The relationship among variables were assessed by Pearson correlation analysis. On the lateral cephalography, it was observed that linear measurements were larger in males than females and that there was a correlation between some variables.