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CHURCHILL LIVINGSTONE 

day. Retention phase lasted for 45 days and followed by Delaire's face mask which was used 24 h a day.

Results: Sufficient maxillary advancement was performed for each case. No misarticulation was observed at the end of the RED treatment.

Conclusions: RED is an effective treatment procedure in maxillary hypoplasia which cannot be treated by conventional Lefort I osteotomy.

Facial trauma

P.096 A role for the rigid external distractor in naso-orbito-ethmoidal fractures?

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Rigid external distractors are used in craniomaxillofacial surgery in the treatment of craniofacial, orthognathic and post-traumatic midfacial deformity and in the treatment of obstructive sleep apnoea using the principle of distraction osteogenesis. The application of a rigid external distractor to the acute management of a case of posterior-telescoping fronto-naso-orbito-ethmoidal fracture is presented to illustrate an alternative role for this device. The gold standard management for the management of the majority of such injuries remains open reduction and internal fixation. In carefully selected cases, external fixation may be appropriate following closed reduction. The case presented, with clinical photographs and CT scan images, is a Markowitz type II, Sakas (small) type IV fracture in which a Rigid External Distractor was successfully used as the external fixator. The device has the versatility to allow further correction, if necessary, by activating the device.

P.097 Trauma scoring and their application in clinical practices of maxillofacial sports injuries

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Facial fractures are mainly caused by traffic accidents, violence and industrial accidents. Sports involving body contacts are also associated with a risk of head and neck injury. Maxillofacial sports injuries is an important workload of staff in oral and maxillofacial surgery.

The aim of the study was to review some of the currently used anatomical and physiological injury scales. Brongels was also presented to estimate patients injury severity in sports accidents. Material consisted of 59 patients treated during period 1992–2002 in Clinic of Maxillofacial Surgery in Katowice. They were divided into two groups. First group included sportsmen who had injuries in sport games group, and second group while practising individual sports games. Among upper face's massif injuries in both groups most popular were zygomatico-orbital fractures. Injuries of lower part of the face were most common in individual sports group.

Brongels Numeral Injury Scale was used to calculation.

In this second group injuries were heavier and were involved with other parts of body not only with head and face.

Brongels Numeral Injury Scale allows to compare injury severity into two or more groups of patients.

P.098 Reconstruction of orbital floor fracture: Clinical and MR imaging long-term results

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Post-traumatic diplopia represents, after enophthalmos, the most common complication of orbital floor fracture. It is commonly assumed that careful surgical reconstruction of the correct orbital volume and shape represents the leading principle for obtaining a correct eyeball position and ocular motility.

Thus, the present study intended to evaluate the late functional and skeletal outcome of orbital floor reconstruction with poly L-lactic acid/poly-glycolic acid PLLA/PGA Lactosorb[®] (W. Lorenz, Jacksonville FL) sheets in 9 isolated blow-out orbital fracture by means ophthalmologic evaluation and magnetic resonance (MR). The patients investigated presented isolated, comminute or displacement orbital floor fracture, with more than 2 mm of bone loss associated to pre-operative diplopia and/or ocular distopia.

In all cases pre-operative diplopia resolved post-operatively. No implant-related complications were seen during the follow-up period, which ranged from 6–12 months from the operation.

Computed tomography scan were obtained at 7th day after surgery to obtain short-term evaluation of any displacement of the graft and confirm the correct positioning of the soft tissues within orbit.

RM orbital investigation at follow up (6–12 month) showed significant alterations in the volumes and position of inferior and medial rectus extraocular muscles and inferior-medial displacement of the connective tissue framework, nevertheless there was a good recovery of eye motility.

P.099 Planning and treatment in second surgery of panfacial fractures: Case report

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Introduction and Objectives: The aim in treatment of panfacial fractures is to obtain the best functional and aesthetic outcomes at primary surgery. However, this is not always achievable. We present a case in which an alternative planning of the second surgery was undertaken, in order to have a sudden global view of previous outcomes at the operating table and a detailed program pre-operatively.

Materials and Methods: Second surgery was delayed for systemic and orthopaedic contraindications after 16 weeks from the primary one. Pre-operatively, beyond a conventional CT-scan, a 3D CT-scan was undertaken and a stereolithographic template was manufactured, based on CT slides. This model helped us at the operating theatre, showing us exactly the outcomes of primary surgery at the level of bony skull, providing us a better detailed view of all bony defects and asymmetries. After second surgery, a control CT-scan was undertaken.

Results: The 3D CT-scan and the stereolithographic template let us know exactly where all defects of the bony skull were, thus allowing a precise quantification of the harvest for bony grafting and leading us to a complete correction of asymmetries without poor outcomes. This planning led also to a sparing of operating time.

Conclusions: Although primary surgery in panfacial fractures should be as definitive as possible to give the best functional and aesthetic outcomes, whenever not possible, a 3D Ct-scan and stereolithographic templates represent a good alternative planning for optimum detailed reconstruction and operative time sparing.