were performed. (B) 15 minipigs (age: 8 weeks) were operated in general anaesthesia. In five animals (group 1) unilateral fractures with dislocation of the condyle were created followed by osteosynthesis using standard mini-plates and screws. In five additional pigs (group 2) a unilateral fracture with dislocation of the condyle was created followed by repositioning the fragment only. In a sham-operated (control) group the condylar process was dissected unilaterally only. Postoperative follow up was 6 months. Then radiological (metrical) and histological studies of the jaws were carried out.

**Results:** (A) Histologically no particular growth centers were found in the foetal condyle but periosteal as well as desmoid growth. The mandibular relationships in growth between the ascending and the horizontal parts varied depending on foetal age. (B) In the experiments enchondral growth was seen in group 1 following fracture dislocation of the condyle and osteosynthesis, but no significant growth disturbances were found when compared with the control group (t-test, p < 0.05). In the second group (fracture dislocation, without osteosynthesis) all animals had significant unilateral growth disturbances.

**Conclusions:** There is no evidence of growth disturbances following osteosynthesis of fracture dislocations of the condyle in juveniles. Simple conservative treatment of condylar fractures, however, resulted in growth disturbances.

**Functional endoscopic surgery and frontal sinus fractures**

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**Objectives:** The purpose of our study was to assess the long term outcome of the use of the nasal endoscopy as a diagnostic and treatment tool as functional endoscopic sinus surgery (FESS) in the treatment protocol of frontal sinus fractures.

**Methods:** 11 patients, admitted between April 1999 and December 2000 at the University of Padova Medical Center with a diagnosis of frontal sinus fracture were included in our study. All patients underwent a preoperative nasal endoscopy for evaluation of the frontal recess. The postoperative follow-up included aesthetic, clinical and endoscopic evaluation. Between June 2007 and March 2008 all patients were recalled for a follow up visit. The follow up visit consisted of a medical history, a physical examination and a nasal endoscopy.

**Results:** At the follow up visit (which ranged from 7 to 8 years after the trauma). All patients were clinically symptom-free and endoscopy was negative in all cases. No patient complained of nasal symptoms related to the FESS procedure. The frontal recess was widely opened in all patients who had undergone FESS while in the remaining ones, the osteomeatal complex was open and properly functioning.

**Conclusion:** According to the current literature, the treatment protocol for frontal sinus fractures does not include FESS. Our results and the current literature on FESS for the treatment of frontal sinus pathology, suggest that nasal endoscopy should be an integral part in the preoperative evaluation and treatment of frontal sinus fractures.