patient suffered from pain or cracking and scar was deemed acceptable in all cases by patients. No facial palsy has occurred. The mean duration of the procedure was 40 minutes.

**Conclusion:** Open reduction and internal fixation of mandibular condylar fractures through anterolateral transmasseteric approach is a safe, simple and quick procedure providing reliable functional and anatomical results.

**O.249** Arthroplasty for facial asymmetry with hypergrowth of unilateral TMJ

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Some jaw deformities with obvious facial asymmetry are caused by unilateral temporomandibular joint (TMJ) hypergrowth. It is necessary to confirm that the elongated TMJ is still growing or not, when the treatment plan is drawn up for such cases. We have 4 cases with unilateral TMJ hypergrowth in progress, and carried out the orthognathic treatment including arthroplasty for them.

One of 4 cases was male, and 3 were female. Their ages were 17 to 36 years. The vertical and anterior-posterior position was within normal range, but mandibular was obviously deviated to the non-elongated side in every case. Maxillary occlusal plane was also inclined from normal side to elongated side. Unilateral TMJ hyperplasia was observed but neoplastic growth was not shown in the X-ray findings. The accumulation on the hyperplastic TMJ was observed in the bone scintigrams. We diagnosed the jaw deformity with unilateral TMJ hyper growth and drew up treatment plan. As the TMJ growth was in progress, we took arthroplasty for the elongate TMJ with Le Fort I osteotomy for the maxilla and SSRO for non-hyperplastic side of the mandible. The amount of resection on the hyperplastic TMJ was estimated by the model surgery with dental cast on the articulator and streichlithogram of the skull. They were followed up 6 months to 5 years after operation and obtained plane occlusion without TMJ complication.

These cases suggested that the arthroplasty is adoptable for the unilateral TMJ hypergrowth in progress and gives us good result.

**O.250** Type A botulinum toxin in the treatment of bruxism, clenching and facial pain: Blinded placebo RCT


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**Introduction and Objectives:** The purpose of this study is to assess the capacity of type-A botulinum toxin (BTX-A) to reduce masticatory, muscular hyperactivity, facial pain and to improve mandibular functionality and psychological conditions.

**Materials and Methods:** In a randomized blinded placebo-controlled study, 20 patients (10 BTX-A, 10 placebo) with chronic pain, hyperactivity of masticatory muscles assessed both clinically and with EMGK and with presence of tooth abrasions were treated with 100 U of BTX-A, injected bilaterally into masseters and temporalis muscles under echographic guidance. Patients had a 6-month follow-up regarding pain, mandibular function and movements, masticatory efficiency and EMGK values.

**Results:** We noticed a decrease of muscular activity in the muscles treated and also in 33% of the other masticatory muscles considered with EMGK; 33% of patients injected with placebo had a subjective improvement not confirmed with EMGK. After 6 months the muscles treated were back to same values of EMGK. BTX-A increases free-way space, decreases pain, improves mandibular functionality are in the first week some patients comprise of light weakness.

**Conclusions:** BTX-A is a valid and reversible treatment. This technique is easy to be perform and is well tolerated by patients. Can be used instead of bite plane in patients with augmented FWS and must be considered the only alternative to maxillary impaction in patients with no FWS. Importance of the psychological aspect of these patients in maintaining the clinical result but not instrumental results has to be stressed.

**O.251** Eminectomy for habitual dislocation under local Anaesthesia: an experience with 11 cases

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Conventional eminectomy for habitual dislocation of the temporomandibular joint (TMJ) is usually performed based on the AI-Kayat approach under general anaesthesia. We modified the procedure to be able to perform under local anaesthesia on medically compromised patients.

**Patients:** This procedure was performed on 18 TMJs in 11 elderly patients (average age: 78 years). All patients had dementia and 10 patients had combined general diseases thought to be contra indication or great risk for general anaesthesia.

**Procedure:** Following to local anaesthesia, a superficial, vertical skin incision, 2 cm in length, was made directly above the articular eminence. To ensure that the cranial nerve was not damaged, careful aspiration by blunt instruments was used to reveal the joint capsule. Entry into the superior compartment was gained via a horizontal incision in the capsule. Similar to the routine manner, the eminence was shaved employing an electric drill.

**Results:** This surgery was accomplished safely in all patients. The operation time took 39 min on average. During mean follow-up period with 16 months, no recurrent dislocation was identified in all patients. The complication, however, was demonstrated in 3 patients, one died with head injury that resulted in a falling accident at 5 days post-operatively. Another 2 patients had short-term problems, swallowing pneumonia and local infection. Interestingly, there was no sign of facial nerve palsy at all.

**Conclusion:** This procedure is significant for patients who have contraindications or great risk for general anaesthesia and are not anxious about the scar.

**O.252** A new hypothesis on the relationship between trigeminal symptoms and antero-medial disc displacement

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**Introduction and Objectives:** Authors suggest that an antero-medial disc displacement exerts a direct compression on both the mandibular nerve, at the emergency from the foramen ovale and its branches. On the basis of an anatomical study, during jaw protrusion over the articular eminence, in patients affected by antero-medial disc displacement, a continuous compression over the root of the IIrd branch of the trigeminal nerve and auriculotemporal nerve (ATN) seems to take place.

**Material and Methods:** To the purpose, 16 temporomandibular joints (TMJ) were dissected and an artificial capsular swelling was obtained injecting in the TMJ inferior compartment a green autopolymerizing solution.