THE RECONSTRUCTION OF TRAUMATIC DEFORMITIES OF THE TEMPOROMANDIBULAR JOINT

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Condylar fractures of the mandible are not uncommon and may disrupt the temporomandibular joint (TMJ) which plays an important role in mastication and speech. The open surgical approach can jeopardize the branches of the facial nerve. Debate on treatment modalities leads to no consensus regarding the surgical approach.

Between January 2010 and January 2020 (10 years), data of 162 patients with condylar fractures have been evaluated retrospectively. Demographic data, etiological factors, site of injury, treatment approach, and complications were assessed for each patient.

Of the 162 patients, 137 were male (84.5%) and 25 were female (15.5%); the male-to-female ratio was 5.48. Mean age was 29.7± 13.6, ranging from 1 to 89. The most common etiological factors were car accidents and blunt trauma. Of these 162 patients, 42 (25.9%) had undergone open reduction and internal fixation (ORIF) technique whereas the rest of them received a conservative approach including maxillomandibular fixation (MMF). A transient frontal branch palsy of the facial nerve (6 patients, 14.2%); a broken miniplate (1 patient, 2.3%), surgical site infection (1 patient, 2.3%) were the complications.

In the past, MMF and active physical therapy have been preferred for condylar fractures. However, in recent years, ORIF has become a more common treatment of choice. To secure the branches of the facial nerve and vascular structures, the key points of the surgical anatomy should be considered and a meticulous technique should be conducted especially during the retraction of soft tissues. The goal of the treatment consists of occlusal stability and normal TMJ movement without any pain.