

TREATMENT OUTCOME OF RIGID FIXATION OF CONDYLAR PROCESS FRACTURES

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ABSTRACT

Condylar process fractures traditionally, have been managed by maxillomandibular fixation. However, in recent years with the advent application of the principles of open reduction and rigid internal fixation in maxillomandibular trauma management, condylar process fractures are treated in the same manner. Seventeen adult patients in whom a total of 23-condylar process fractures were treated by open reduction and rigid internal fixation using bone plate and screw fixation through extra oral approach. Six months postoperatively the average maximal mandibular opening was 43.5mm and the average lateral mandibular movements was 6.5 mm. Two patients showed TMJ pain and clicking after treatment, while in one patient, a slight weakness of the marginal mandibular nerve was encountered at the end of the follow-up period. Occlusion was adequate except in 3 patients who needed selective grinding to alleviate premature contacts.

REVIEW OF LITERATURE

Fracture of the condylar process of the mandible is a common finding after facial trauma and constitutes more than 50% of all mandibular fractures in some series ⁽¹⁾. Management of the condylar fracture in adults generates a great deal of controversy regarding whether surgical or conservative approach should be employed ⁽²⁾. The literature is replete with different treatment modalities in restoring condylar process fractures, which reflects the lack of consensus regarding condylar process fracture management ⁽³⁾. Dahlstrom et. al. (1989)⁽⁴⁾ treated condylar fracture in a group of patients conservatively. Thirty-six patients were investigated. Fourteen patients aged between 3 and

11 years, eight patients aged between 12 and 19 years, and fourteen patients aged above 20 years. The authors concluded that, no major growth disturbances were observed in those injured as children and function of the masticatory system was good. In teenagers the anatomy and function of the temporomandibular joint (TMJ) was not as good as in children, but hardly give rise to symptoms. In the adult group, signs of dysfunction were frequently observed. The authors also noted that in cases of condylar fracture without displacement, only mild dysfunctional symptoms might be expected irrespective to age. However, moderate signs can be expected after condylar displacement, especially in older group.

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