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MANAGEMENT OF RECURRENT TEMPOROMANDIBULAR JOINT ANKYLOSIS

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ABSTRACT :

The present study was conducted to assess the use of costochondral graft in joint reconstruction in 7 patients with recurrent temporomandibular joint ankylosis. At one year postoperatively we were able to obtain a stable and reasonable mouth opening ranged from 34 to 39mm with an average of 35.4mm. Experience and operative technique is presented.

INTRODUCTION :

Temporomandibular joint (TMJ) ankylosis with its subsequent mandibular hypomobility and facial deformity is a distressing disease from functional and esthetic point of view. TMJ ankylosis is a severely disabelling illness especially when it affects young growing children. Inadequate diet, impaired speech, facial disproportion and possible respiratory emberassement may result in serious physical & psychological problems [6] TMJ ankylosis is usually associated with trauma, local or systemic infection or systemic disease [3,5,13,18]. In cases of trauma, it is hypothesized that intraarticular hematoma, especially when coupled with limitation of mandibular movement will organize and result in excessive scarring and bone formation that leads to hypomobility[10]. Infection of the TMJ may result from local spread of infection from mastoiditis or otitis media [10]. The TMJ may be infected by hematogenous spread of systemic infection as tuberculosis, scarlet fever or gonorrhea [10]. In addition, TMJ ankylosis may be a manifestation of systemic diseases as ankylosing spondylitis and rheumatoid arthritis [10]. Regarding management of TMJ ankylosis, a variety of techniques have been advocated, the most frequently reported operations include condylectomy [19], gap arthroplasty [12,17], interpositional arthroplasty and joint reconstruction using alloplastic or autogenous materials [6,14,16]. In case of condylectomy, it is usually performed when the condylar outline is not disturbed and usually in fibrous ankylosis. Gap arthroplasty is done in bony ankylosis where a gap up to 2.0cm is made in the ascending ramus away from the fused joint creating a pseudoarticulation [12] In case of interpositional arthroplasty, a variety of alloplastic materials as teflon sheats[1] and silicones (silastic)[3] or autogenous grafts as skin[11] are placed in the osteotomy site in an attempt to prevent reankylosis. Joint reconstruction using au-

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