



**“INCIDENCE AND MANAGEMENT OF TEMPOROMANDIBULAR JOINT
ANKYLOSIS- A RETROSPECTIVE STUDY”**

By

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ABSTRACT**Aim of the study:**

To assess the incidence and the methods of management of TMJ ankylosis and the extrapolation of the causes of recurrence of ankylosis and its management.

Materials and methods:

The study included Eighty-four patients with TMJ ankylosis who were treated at the SDM Craniofacial unit & Research Centre from 2002-2012. Only 35 patients turned up for assessment and were included in the study, 49 patients were lost to follow-up. Patients' joint function was assessed by examining the maximum interincisal mouth opening, the lateral joint movement and the presence of any complications after the surgery. The pre-operative assessment included a thorough history and physical examination to determine the cause of ankylosis, assessment of maximum incisal opening (MIO) and photographs. The radiographic examination included panoramic radiographs and computed axial tomograms to determine the type and extent of ankylosis. All patients underwent gap arthroplasty to release the ankylosis. Aggressive physiotherapy exercises were instituted post-operatively, and the patients were recalled for regular follow-ups. The compliance towards physiotherapy was noted on follow-up and was compared with the occurrence of re-ankylosis in patients.

Results:

Mean age of the study subjects was 14.4 ± 9.77 years. etiology of the ankylosis was trauma in 22 patients, ear infection in 5, birth trauma in 3, congenital in 2 and history was not clear in 3 patients. 25 cases were unilateral and 10 cases were bilaterally affected. Bony ankylosis was present in 29 cases and fibrous ankylosis in 6 of them. The mean pre-

operative maximum interincisal opening (MIO) was 5.4 ± 5.71 mm. the mean MIO post-operatively was 42.17 ± 5.68 mm and on follow-up was 36 ± 12.43 mm. 11 patients experienced recurrence of ankylosis within 2 years post-operatively. 2 of them had temporary facial nerve paresis. Recurrence of ankylosis was noted in all of the patients who did not follow post-operative physiotherapy. It was also noted more in the pediatric age group than the adults.

Conclusion:

The results emphasize the importance of post-operative physiotherapy in preventing re-ankylosis of the temporomandibular joint. They also point towards the observation that re-ankylosis is seen more in the pediatric age group than the adults. The study emphasizes the need for regular follow up of the patients. The patients with TMJ ankylosis need to be explained the importance of regular physiotherapy of the joint in order to prevent re-ankylosis along with the need of undertaking surgical treatment for correction of ankylosis as soon as it is detected to prevent any post-ankylotic deformity.