



MANAGEMENT OF TMJ ANKYLOSIS - A CASE REPORT

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INTRODUCTION

Temporomandibular joint (TMJ) Ankylosis involves fusion of the mandibular condyle to the base of the skull.

When it occurs in a child, it can have devastating effects on the future growth and development of the jaws and teeth. Furthermore, in many cases it has a profoundly negative influence on the psychosocial development of the patient because of the obvious facial deformity, which worsens with growth. Trauma and infection are the leading causes of ankylosis.

Early diagnosis and treatment are crucial if the worst sequelae of this condition are to be avoided.

CASE REPORT

A 12-year-old female patient reported to our department with a chief complaint of difficulty in opening her mouth. No proper history was given by patient attendants.

the maximum mouth opening was limited to 1 mm. Facial asymmetry characterized the left side of the face. Coronal CT slices showed that the bony mass extended to the medial cranial base [Figure 2]. Thus, we were able to classify the lesion as true osseous/condyle ankylosis.



Figure 1 Figure 2 Figure 3

Pre-operative Photograph

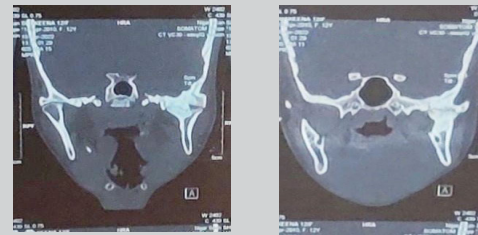


Figure 4: Coronal CT slice of the left temporomandibular joint ankylosis.



Figure 5: Outline of preauricular incision was made as described by Al-Kayat & Bramley.



Figure 6 : Incision

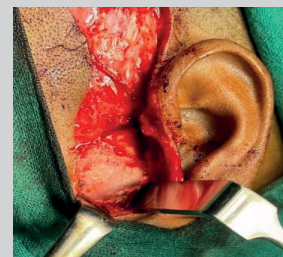


Figure 7: Intraoperative view of temporomandibular joint ankylosis.

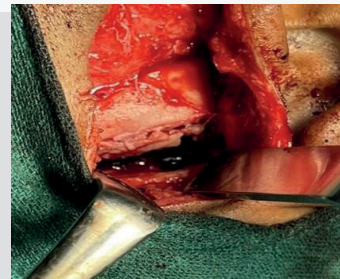
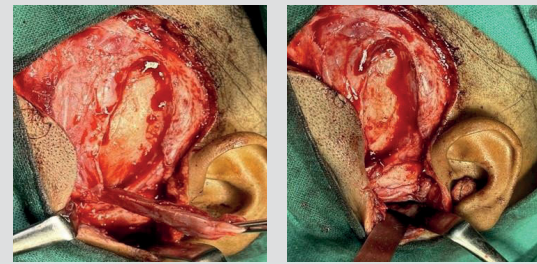


Figure 8: Resection of ankylotic block



Figures 9 &10: The temporalis myofascial flap raised & placed into gap arthroplasty & sutured.



Figure 11: Suturing. Physiotherapy was started after 4 days of Surgery. Maximum mouth opening was 15 mm. Contralateral coronoidectomy was performed to achieve maximum mouth opening. Now Maximum mouth opening is 30 mm .

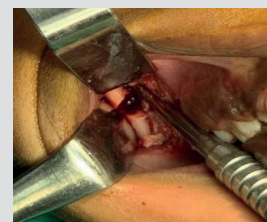


Figure 12: Contralateral coronoidectomy



figure 13 : 1 week post operative coronoidectomy maximum mouth opening was 30 mm without heister.

DISCUSSION

Management of ankylosis occurs through surgical intervention; several authors agree that it is necessary to use an interpositional material to prevent re-ankylosis after arthroplasty.

This particular aspect of the treatment has been subject to numerous discussions. The temporalis muscle flap has been used for about 100 years for restoration of the facial and the craniofacial area; it is also the interpositional material most commonly used for correcting TMJ ankylosis due to its ease of handling, proximity to the temporal joint, good functional results, successful clinical results, and minimal complications.

However the versatility of the temporalis myofascial flap technique in interpositional material is not certain and failures may occur. Inadequate removal of bone can result in re-ankylosis.

Success in preventing re-ankylosis after TMJ reconstruction is dependent upon appropriate surgical technique and long-term patient compliance in undertaking frequent mandibular exercise.

CONCLUSION

Success in the preventing re-ankylosis after tmj gap arthroplasty is related primarily to the early postoperative physiotherapy, maintained long term.

The technique described above is associated with adequate bone removal and excellent intraoperative joint mobilization.

Nevertheless, the findings presented here are based on a single case; controlled trails must be performed to confirm this hypothesis.

REFERENCE

1. Mehta, D.M., Anand, V., JACOBINA, J.J., ASOKAN,G., BALAJI, N. and ASWINI, S.,2015. Temporomandibular Joint Ankylosis-A Case Report. Biomedical &Pharmacology Journal, 8(SpecialOct), p.533.
2. Kumar, S.Y., Pallavi, P., Amit, S. and Sohail, S., 2017. Temporalis myofacial flap in TMJ ankylosis with gap arthroplasty: a case report. Ann. Int. Med. Dent. Res, 3(3).