



ACQUIRED COMPLICATION OF FACIAL TRAUMA: A CASE REPORT

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ABSTRACT

Facial Asymmetry is the main clinical feature which often bothers the patient following facial trauma, due to esthetic reasons. Ankylosis in Greek means "stiff joint". This is a condition in which the condylar movement is limited due to an abnormal consolidation of the joint. TMJ disease is a significant health problem both in terms of its impact to an individual and its incidence. A wide varieties of condition affect the TMJ including congenital anomalies, ankylosis, arthritis and internal disc derangement. TMJ ankylosis involves the fusion of the mandibular condyles with the base of the skull and results in functional aesthetic and psychosocial limitations. In this report we present a case of unilateral ankylosis due to complication of facial trauma in a 20 year old male patient.

KEYWORDS: Anomalies, ankylosis, arthritis and internal disc derangement.

INTRODUCTION

TMJ (Temporomandibular Joint) ankylosis is a disabling condition of mastication in which the condylar movements are limited by the mechanical problem in the joints or a mechanical cause not related to the joint component. In bony ankylosis, the joint space may be partly or completely obliterated by the osseous bridge, which may form a slender segment of bone to a large bony mass. This extensive new bone may fuse this condyle to the cranial base. Conventional radiography is considered as the most important diagnostic method for the bone analysis with different angulation and rotation of the patient head towards it.

CASE REPORT

A 20 years old male patient reported to the Department of Oral Medicine & Radiology with the chief complaint of restricted mouth opening following accidental injury 1 year back. Extra oral examination revealed facial asymmetry on the left side of the face, deviation of mandible towards left side and bony protuberance could be palpated in the pre auricular area on the left side. TMJ Ankylosis was suspected, following clinical examination, an OPG was done. (Fig 1, 2, 3).

OPG revealed a large round to ovoid diffuse radiopacity about 2cm in diameter on the left condylar head with complete obliteration of the joint space. There was

shortening of the ramus on the left side as compared to the right side and antegonial notching.(Fig 4).

After preliminary investigations, a differential diagnosis of osteophyte formation in osteoarthritis, condylar hyperplasia, osteoma, osteochondromas was made.

LEGENDS



Fig. 1: Front profile of patient showing facial asymmetry.



Fig. 2: Injury scar in the pre auricular area.



Fig. 3: Mandibular Deviation towards left side.



Fig. 4: OPG showing left condyle fused to articular fossa with complete obliteration of joint space.

DISCUSSION

As per various studies it is seen trauma is the main etiological factor for TMJ ankylosis. Other factors include infections and forcep deliveries. Clinically the disease presents in the form of facial asymmetry, limitation of mouth opening, disturbed occlusion and sleep apnea. TMJ ankylosis is one of the most common pathologies affecting the facial skeleton. Articular trauma is the basic cause of TMJ ankylosis with higher incidence in children due to osteogenic potential. If the cause is trauma intra-articular hematoma along with scarring and excessive bone formation leads to the hypomobility.

Unilateral TMJ Ankylosis is more common as compared to bilateral type. In our case too, facial asymmetry, reduced mouth opening and mandibular deviation along with radiographic image led to the diagnosis bony unilateral TMJ ankylosis is seen.

Differential diagnosis of osteophyte formation of osteoarthritis, condylar tumor, osteomas and osteochondromas can be made based on radiological appearance. This can be further confirmed by investigations like CT.

CONCLUSION

Every dental surgeon needs to know about the needful investigations, diagnosis and treatment planning of ankylosis because at any occasion they might come across such a case in day to day practice. At the same time unnecessary money and time consuming investigations like CT has to be indicated, which case requires CT has to be judged.

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