

Causes of TMJ Ankylosis in Anterior Sindh: An Observational Study

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Abstract: Objective: To identify the causes of TMJ in anterior Sindh and to observe the maximum recurrent cause of TMJ ankylosis. **Materials and Method:** Study was conducted at the Department of Oral & Maxillofacial Surgery at Larkana, Pakistan from January 2013 to April 2015. In the current study 100 patients having TMJ Ankylosis were included. History of patients was RTA, middle ear infection, and autoimmune diseases. Data were analyzed using descriptive statistics. **Results:** The maximum ratio of the patients belonged to 9-17 years and history of RTA was the main cause in the progression of TMJ. **Conclusion:** The main cause of TMJ ankylosis is Trauma in the patients in anterior Sindh.

[Qaimuddin Shaikh, Muhammad Shahzad, Usman Qadir Khan. **Causes of TMJ Ankylosis in Anterior Sindh: An observational study.** *N Y Sci J* 2015;8(9):30-32]. (ISSN: 1554-0200). <http://www.sciencepub.net/newyork>. 6

Keywords: TMJ, Causes, Anterior Sindh

1. Introduction

Incidence of TMJ ankylosis is high in worldwide especially in Anterior Sindh, Pakistan. It was noticed that trauma is the main cause of TMJ ankyloses and concerns with anemia and malnutrition.^(1, 2) Ankylosis of the Temporomandibular joint is a state distressing the masticatory structure which assortment from restriction to complete limitation of opening mouth,^(3, 4) further characteristic consist unformed mandible growth leads to facial asymmetry is common because of trauma, like fissure with contribution of the inner articular, trauma from obstetric pincers, contaminations such as progressive arthritis and certain systemic diseases.⁽⁵⁻⁸⁾

The three main causes of TMJ ankylosis are trauma, inflammation and contamination. Damage to the fragile vasculature at the condylar heads during intrauterine fetal movement is a possible etiology for congenital ankylosis. Trauma sustained by the newborn during a difficult forceps delivery and trauma inflicted by an abusive adult have been implicated. Both untreated fractures and badly comminuted condylar head fractures treated by immobilization for extended periods have resulted in ankylosis⁽⁹⁻¹²⁾

2. Methodology

Study was conducted at the Department of Oral & Maxillofacial Surgery at Larkana, Pakistan from January 2013 to April 2015. In the current study 100 patients having TMJ Ankylosis were included. The patients were in different age group (60 males and 40 females). History of patients was RTA, middle ear

infection, and autoimmune diseases. Data were analyzed using descriptive statistics.

3. Results & Discussion

The maximum ratio of the patients belonged to 9-17 years and history of RTA was the main cause in the progression of TMJ.

Males were majority with 60% rather than females age distribution where 9-17 years leads in males and females. Left side was on 18 males, 12 on right and 30 bilateral and 10 unilateral. In females, left side on 12, right side on 8, 15 bilateral and 5 unilateral. Trauma was present in 10 bilateral ankyloses cases. (Fig: 1-3)

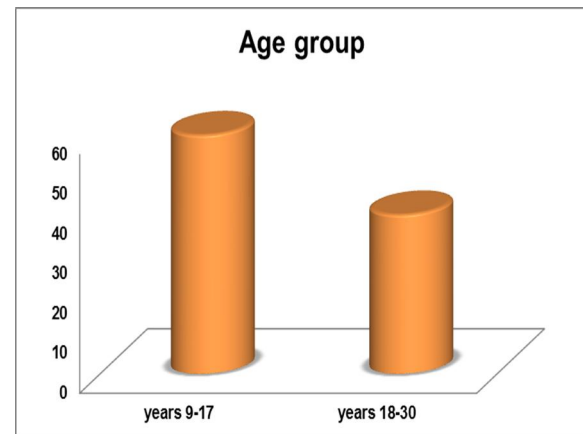


Fig: 1 Age Distribution Of Patients

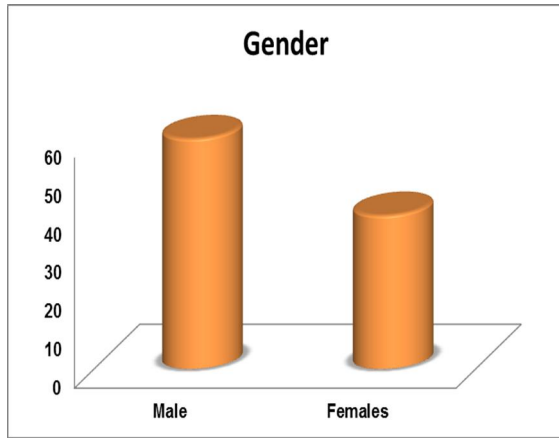


Fig: 2 Gender Distribution Of Patients

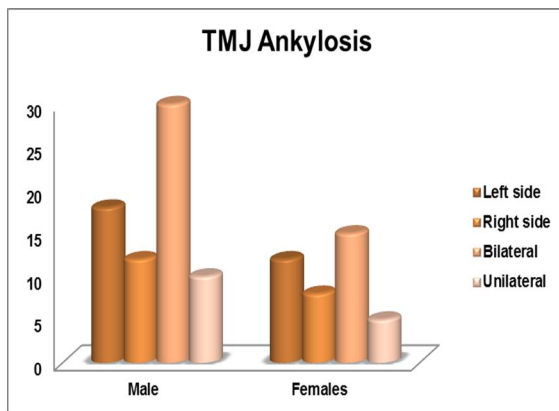


Fig: 3 TMJ Ankylosis in Patients

The present study showed that trauma was the main etiological factor that is parallel to hospital-based studies^(13, 14) lead in various portions. The trauma is commonly consequence in ankylosis of the TMJ is mostly veteran in infantile. Uncertainty the assessment of controlling is not taken in time the facial aspects are pretentious as facial alteration is higher once the emancipation is done in infantile.⁽¹⁵⁻¹⁸⁾ in the present study revealed that the cause behind higher prevalence of ankylosis in male than females which could be related to the differentiation in the anatomy of the neck of the condyle. The occurrence of TMJ ankylosis was increase in the present study.

Conclusion

The main cause of TMJ is Trauma in the form of RTA in Anterior Sindh.

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9/8/2015