CASE REPORT

Condylar Hyperplasia : A Rare Case Report

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Abstract
Condylar hyperplasia of mandible is overdevelopment of condyle, unilaterally or bilaterally, leading to facial asymmetry, mandibular deviation, malocclusion and articular dysfunction.

(Key words: Condylar hyperplasia)

Introduction
Condylar hyperplasia is an uncommon malformation of the mandible, created by excessive growth of one of the condyles. Unilateral hyperplasia of the mandibular condyle is generally characterized by a slowly developing, progressive enlargement of the condyle and elongation of the mandibular neck resulting in facial asymmetry and shifting of the midline of the chin to the unaffected side. The aetiology of condylar hyperplasia is controversial and not well understood. Suggested theories include neoplasia, trauma followed by bleeding leading to excessive proliferation in repair, or a response to infection or to abnormal loading. Histological examination of the mandibular head reveals signs of growth. There is over activity in the articular cartilage. The thickness of the proliferative zone increases, the fibro-cartilagenous zone becomes hypertrophic, endochondreal bone formation occurs, while the articular zone remains remarkably intact. Here we are presenting a case of unilateral condylar hyperplasia in a young patient.

Case Report
A 18 year old male patient came to the OPD of department of Oral Medicine and Radiology, of Jaipur Dental College with chief complain of stains on the teeth since last 6 months.

Fig 1:Front profile shows elongation of the right side of the face

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On examination, facial asymmetry was evident, for which patient was unaware. Patient did not have any difficulty in opening the mouth. Extraoral examination, revealed elongation of lower half of right side of the face as compared with the left side. The prominence of the chin appeared shifted to the left side. The left side of the face appeared flattened. On intraoral examination, oral mucosa was normal with permanent dentition, and a total of 29 teeth with relatively good oral hygiene and no previous history of trauma. Medical, dental and family history were non contributory.

Based on the history and clinical findings the provisional diagnosis given was Condylar hyperplasia and differential diagnosis as hemifacial hyperplasia.

Radiographic investigations were carried out. Panoramic view revealed symmetrical condylar enlargement of the right side as compared to the left side and elongated condylar neck. The ramus appeared elongated and the lower border of the right side mandible was thickened. 17, 18, 28 and 38 were congenitally missing as the patient did not give the history of extraction. Pneumatisation of maxillary sinus of right side and idiopathic sclerosis in 33 evident.

Hence, we gave a final diagnosis of condylar hyperplasia.

Treatment advised to the patient was Oral Prophylaxis and regular follow up (as patient was not willing to get the treatment done for hyperplasia).

**Discussion**

Asymmetric conditions attributed to condylar hyperplasia of the mandible were first reported by Adams in 1836. Gottlieb described condylar hyperplasia as an osteoma causing unilateral deformity and prognathic deviation subsequent to a bilateral disproportion in the size of the condyles.

The aetiology and pathogenesis of condylar hyperplasia is unknown. A plethora of presumed causes has been proposed in the course of time. Some of them include previous trauma, true neoplasia, hormonal disturbances, partial hemihypertrophy, arthrosis, osteochondromatosis, local circulatory disturbances, and neurotrophic disturbances. Other condition which can cause challenges in diagnosing this condition includes hemifacial hyperplasia but in this condition, the associated soft tissues and teeth also will be enlarged which was absent in our case also.

Condylar hyperplasia usually occurs after puberty and is completed by 18 to 25 years. Prominent features of condylar hyperplasia include an enlarged mandibular condyle, elongated condylar neck, outward bowing and downward growth of the body, and ramus of the mandible on the affected side, causing fullness of the face on that side and flattening of the face on the contralateral side. The prominence of the chin is shifted to the unaffected side. An open bite might exist on the abnormal side. This depends, on one hand, on the rate of increasing enlargement of condyle and, on the other hand, on the downward growth of the maxillary alveolus and teeth. Our
patient had similar features except that the open bite.

Radiographically, the condyle may appear relatively normal but symmetrically enlarged, or it may be altered in shape (e.g., conical, spherical, elongated, lobulated) or irregular in outline. It may appear more radiopaque because of additional bone present. A morphologic variation like elongation of the condylar head and neck may be seen. The ramus and mandibular body on the affected side also may be enlarged.¹

In the present case, patient had the features which confirmed the diagnosis of condylar hyperplasia. Technetium 99 scintiscanning is an essential diagnostic tool. The radioactive isotope is Technetium 99 methylene diphosphonate.⁴ Scintiscanning is useful for three reasons, it is possible to determine which side is affected, it becomes evident whether there is an abnormal condylar growth centre or whether there is generalized mandibular growth, and finally, it is apparent whether or not the hyperplasia is still active or if it has become stable. It’s a self-limiting process that can cease active growth at anytime and is generally seen in patients between the ages of 11 and 30 years of age.

Condylectomy on the affected side is the accepted method of treatment. It gives the best possible result with little post-operative discomfort to the patient.⁷

**Conclusion**

Unilateral condylar hyperplasia is one of the rare condition which results from increased activity of the condylar growth centre. Careful history, clinical and radiographic examination will usually reveal the true nature of the condition. As this condition can cause challenges in diagnosing, it has to be carefully differentiated with other similar conditions for planning and initiating the proper treatment modality for both functional activity and for aesthetic appearance.

**References**