Facial Asymmetry due to Condylar Hyperplasia

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ABSTRACT
Facial asymmetry can be attributed to various conditions from developmental to malignancy. Depending upon the etiology, the treatment plan has to be modified. With the latest imaging modalities we are in a better position to find whether the asymmetry is due to soft tissue or bone pathology. The case of a patient who reported with facial asymmetry and whose radiograph showed unilateral condylar hyperplasia is presented here.

Keywords: Condylar hyperplasia, Facial asymmetry, Unilateral open bite.

INTRODUCTION
Facial asymmetry can be due to various reasons, one of them being condylar hyperplasia. Condylar hyperplasia is a developmental anomaly that results in enlargement and occasionally deformity of the condylar head. This may have a secondary effect on mandibular fossa as it remodels to accommodate the abnormal condyle. It can lead to facial asymmetry, mandibular deviation, malocclusion and articular dysfunction. It is common between 10 and 30 years of age, rarely found after 40 years of age. A 40-year-old male with condylar hyperplasia and typical clinical and radiographic features is presented here.

CASE REPORT
A 40-year-old male patient reported to Department of Oral Medicine and Radiology, YMT Dental College, Kharghar, Navi Mumbai with the chief complaint of bleeding gums. On examination (Fig. 1) he had a gross facial asymmetry with deviation of chin toward the left side. He gave a history of fall hitting his lower jaw at the age of 5 to 6 years. When the patient opened the mouth there was deviation of the lower jaw toward affected side. Unilateral posterior open bite (Fig. 2) was present on the affected side. Patient also gave history of less chewing on the right side. Based on the above findings OPG, PA CEPH and TMJ views were taken and a provisional diagnosis of condylar hyperplasia was given.

The OPG of the patient (Fig. 3) revealed lobulated and enlarged right condyle compared to the left side along with the spur formation on medial aspect of the right condyle. Mandibular fossa was shallow and articular eminence, blunt. OPG also showed increased height of ramus and body on right side as compared to left side. The asymmetry of mandible was also apparent on the posterior-anterior skull view and TMJ view of radiographs (Figs 4 and 5) of the patient. Based on these clinical and radiological findings it was concluded that facial asymmetry of this patient was due to unilateral condylar hyperplasia.

DISCUSSION
Hyperplasia of the mandibular condyle on one side was first described by Adams in the medical section of the British association in 1836. Humphry (1856), Eve (1883) and Heath (1883) reported few more cases. Condylar hyperplasia is...
reported to be a self-limiting process that can cease active growth at anytime and is generally seen in patients between the age of 11 and 30 years. In this case report, the patient was beyond the maximum range of age. Condylar hyperplasia appears as an acceleration of growth in young patients that arises at the same time of physiologic condylar growth, or as an unpredictable growth spurt in adults. Jonck has classified this condition in four types.

Class I: There are condylar enlargements, no midline deviation and loss of posterior occlusion.

Class II: Condyle and ramus are normal, there is midline deviation, there is elongated mandibular body, and posterior occlusion is present.

Class III: The changes are acquired. Condyle is enlarged with spur formation, there is midline deviation, and there is loss of posterior occlusion.

Class IV: The condylar enlargement is due to neoplastic process, there may or may not be enlargement of the ramus and body.

According to above classification this patient has class III type of condylar enlargement. Active growth of the condyle can cease at any time or may continue for many years and produce severe deformity, such as unilateral condylar enlargement and ramus lengthening on the affected side. In the treatment planning for patients with unilateral condylar hyperplasia, it is very important to differentiate active phases from inactive. Single photon emission computed tomography scans can give an accurate picture of bone activity in the condyles whether there is active or inactive growth. When the growth stops, a corrective osteotomy can be performed. In the case of persistent growth and progressive facial asymmetry, the growth center should be removed by condylectomy. The complication in this patient was unilateral open bite and contralateral chewing. Periodontal treatment with condyloplasty and occlusal rehabilitation was advised as a part of treatment planning. So, the patient was referred to department of periodontics, oral surgery and prosthodontics for expert management. But after the periodontal treatment was over, patient did not report back to the hospital for correction of the hyperplastic condyle.

CONCLUSION

Since, the patient is 40-year-old and the facial asymmetry is static, we can assume that the growth of the condyle has stopped and there is no need for further investigations to assess the bone activity. But in young patients especially in whom there are symptoms, such as pain, clicking of TMJ further investigations are required to know bone activity so, that treatment can be planned and correction can be done promptly.

REFERENCES

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