

Inferior Turbinate osteoma - rare cause of nasal obstruction

K. Krishna Kumar · V. Sumathi · V. Sundhari

Abstract Osteomas are common benign tumors of the paranasal sinus, with a predilection for the frontal sinus. We report a rare case of inferior turbinate osteoma in a 54 year old lady. The osteoma was resected completely by endoscopic sinus surgery and the patient was relieved of symptoms.

Keywords Osteoma · Inferior turbinate · Endoscopic surgery of Osteoma · Headache & Facial pain.

Introduction

Osteomas are common benign tumors of the paranasal sinuses, usually asymptomatic and are found as a coincidental finding during routine radiological investigations. Osteomas are common in the frontal bone (arising from the area of the frontal sinus), cranial vault, mastoid or mandible.

Current theories for the etiology of paranasal sinus osteomas are developmental, infectious and traumatic. Histopathologically osteomas are of two types, osteoid osteoma composed of osteoid and woven bone, seen in the skull and facial bones. Compact osteoma is composed of mature lamellar bone with little medullary space, usually seen in the craniofacial or nasal bones. Osteomas of the paranasal sinuses have been commonly reported, but osteomas arising from the turbinate are very rare and only 5 cases of turbinate osteomas have been reported in literature worldwide. We report this case of inferior turbinate osteoma for its rarity and for being the only case reported from India so far.

Mesolella et al [1] and colleagues in 2005 endoscopically resected an isolated case of inferior turbinate osteoma causing nasal obstruction.

Whillet and Quiney et al [2] treated an isolated osteoma of the middle turbinate with unilateral nasal obstruction by lateral rhinotomy. Preoperative radiological assessment to determine the extent of the lesion and its relations to involvement of vital structure by computerized axial tomography was emphasized.

Kato Kazutosh et al [3] reported an isolated osteoma of the middle turbinate in a 31 year lady with nasal obstruction and epiphora, which was removed endoscopically.

Lela Migiroy et al [4] reported a rare case of aerated middle turbinate osteoma in a patient with who presented with headache and nasal obstruction.

Ishimaru et al [5] reported the only case of superior turbinate osteoma excised by endoscopic approach.

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Case report

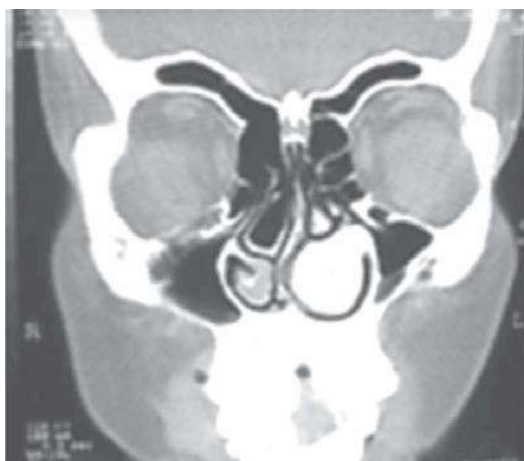
A 54-year-old lady presented to ENT outpatient department with the complaints of left nasal obstruction of 6 months duration and chronic headache with left facial pain not relieved by analgesics. She had no significant medical history.

On examination her left nasal cavity showed abnormally enlarged inferior turbinate completely obstructing the nasal airway. Nasal endoscopy revealed a grossly hypertrophied left inferior turbinate occupying the entire left nasal cavity pushing the septum to the right and right middle concha bullosa.

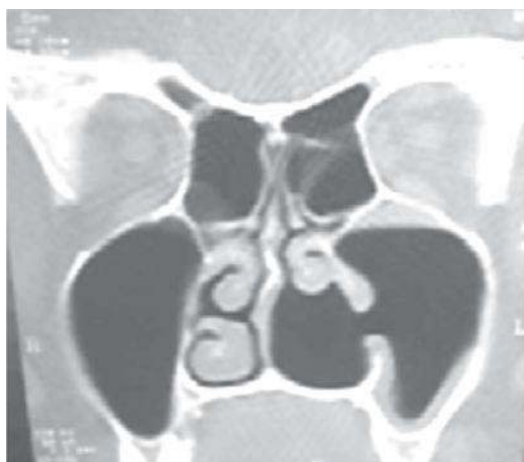
Computerized tomography (Figs.1&2) paranasal sinuses revealed hyper intense bony mass arising from the left

inferior turbinate extending into the entire left nasal cavity and pushing the septum to the right. She was also found to have a concha bullosa of middle turbinate on the right side.

She underwent endoscopic removal of left inferior turbinate osteoma under general anesthesia. Inferior turbinate osteoma was removed completely with help of microdrill under endoscopic guidance. The histopathological examination of the osteoma showed osteoid osteoma. Postoperatively the patient was relieved from headache and nasal symptoms. Her Post operative computerized tomography (Figs.3&4) showed the well aerated left maxillary sinus and complete resection of inferior turbinate osteoma.



Figs. 1&2 Preoperative CT PNS (Coronal &Axial) view showing left inferior turbinate osteoma



Figs. 3&4 Postoperative CT PNS (Coronal &Axial) view showing complete resection of left inferior turbinate osteoma.

Discussion

Osteomas are tumors with normal bony architecture; composed of a central area of cancellous bone surrounded by a layer of compact bone and tend to be well demarcated. This tumor though common in the paranasal sinus is now being increasingly seen arising from the turbinate. Nasal obstruction, facial pain, headache, recurrent sinusitis and lacrimation are common presenting symptoms of osteomas in the turbinates. We report one case of inferior turbinate osteoma, second case in literature and the first one in India, which was endoscopically resected completely.

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