Case Report:

Chondroma of nasal septum: A case report

Dr.M.I.Katre, Dr.S.A.Jaiswal, Dr.S.G.Chintle

Department of ENT , Dr.V.M.Govt.Medical College Solapur & C.S.M.Civil Hospital Solapur 413003
Corresponding author: Dr.M.I.Katre; Email id: drmahendrakatre@gmail.com

Abstract: Chondroma affecting the maxillofacial area are rare benign tumours with few cases recorded in literature. They are slow growing tumours which may cause nasal obstruction & disfigurement. Chondroma is a benign tumour, composed of mature hyaline cartilage. It is seen particularly in the paranasal sinuses, nasal cavity and in the larynx. In the literature 50% of Chondroma arise from ethmoids and nasal septum contribute 17% of cases that to almost arise from posterior part of nasal septum. Considering rare entity we report a case of solitary Chondroma arise from anterior part of nasal septum in 30 year male.

Key words: Chondroma, Nasal septum

Introduction:

Epithelial tumours constitute most of those occurring in the nose or the nasal cavity [1]. Chondrogenic tumours are relatively uncommon, with malignancy occurring twice as frequently as in benign tumours [2]. Histologic differentiation between chondroma and chondrosarcoma, though crucial in deciding treatment options, may be difficult. Benign cartilaginous neoplasm of nose surprisingly infrequent although hyaline cartilage constitute whole of anterior part of its framework .Ringertz[3] found only 2 cases in his series of 391 tumours of nose and paranasal sinus. In a series in which there was chondroma arising from posterior edge of nasal septum and another in ethmoids and middle turbinate. It was found 50% of cases arose from ethmoids and only 17% from posterior edge of nasal septum[2].It is indeed a very rare tumour. Treatment of nasal chondroma is surgical excision .Definite propensity of recurrence probably in cases where removal is incomplete.

Case report:

A 30 year old male came with c/o progressive nasal obstruction since 6 years, oral mass involving upper jaw with loosening of upper teeth, painless mass in nose initially small size gradually increased to present size about 5X4 cm.

ENT Examination:-

Nose: Widening of nose, obliteration of Left nasolabial fold, an elliptical firm swelling of the nasal Septum occluding both nostrils.

Oral cavity: A large swelling in the anterior alveolar, region extending to hard palate. Swelling - firm in consistency – non tender, Displacement of upper teeth, Malocclusion & Loosening of teeth Egg -shell crackling of overlying bone. (Fig: 1)

Other ENT examination: WNL

No evidence of cranial nerve involvement. No palpable cervical lymph node.

Investigation:

CT scan plain: - E/o mixed soft tissue & cystic mass expanding the Left maxilla & nasal cavity with destruction of hard palate. Involving anterior part of nasal septum, there is destruction of lateral nasal wall on Left side with involvement of ethmoids. No significant posterior or lateral tumour extension. No e/o involvement of the orbit. (Fig: 2)

An incisional biopsy: Reported as chondroma

Treatment:

Surgical Excision done by midfacial degloving approach under general anesthesia:

Sub labial incision taken. After making bony cuts through hard palate whole tumour removed enblock (fig: 3), bone over tumour showed egg-shell crackling. A temporary obturator was put to obturate surgical defect.

Postoperative period was uneventful. Patient put on intravenous antibiotics.

Patient discharged on 7th postoperative day.

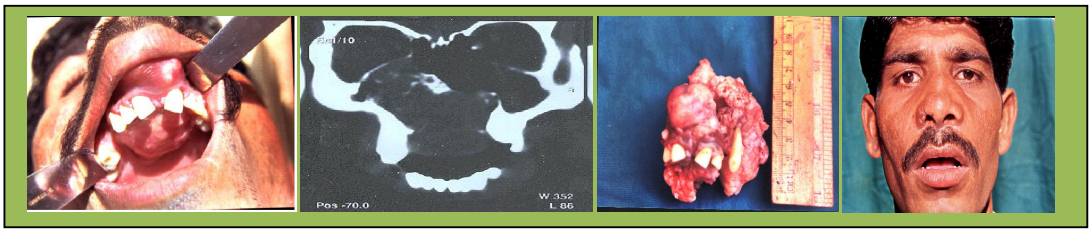
Histopathological evaluation: Suggestive of microscopically the nodules of cartilage are well circumscribed, have a hyaline matrix & are hypocellular; the neoplastic chondrocytes that resides in the lacunae are cytologically benign s/o of chondroma.

Discussion:

Nasal chondroma is a rare neoplasm. Approximately 60% of tumours occur in patients less than 50 years old [1]. The age of 7 patient of nasal chondroma in series of Fu& Perzini [4] ranged from 10 to 46 year with average of 26 years. No sex predilection exists. Chondroma arising from the nasal septum is midline. They are usually well circumscribed and appear fairly homogenous on computer tomographic scan. They tend to be expansile lesions that remodel bone [1]. They do not provoke sclerotic bone at their margins. Calcification of the chondroid matrix occurs rarely [1]. The diagnosis of a nasal chondroma is based on the combination of clinical, radiologic, and pathologic findings. Grossly the lesion are firm and appears translucent microscopically they consist of adult cartilage tissue without nuclear atypia.

Chondrogenic tumours of the head and neck region are rare and most often malignant. The sites of predilection in the head and neck region include ethmoid sinus (50%), maxilla (18%), nasal septum (17%), hard palate and nasopharynx (including sphenoid sinus) (6% each), and alar cartilage (3%) [2]. These tumours probably arise from remnants of the embryonal cartilaginous skeleton that escape resorption during endochondral ossification. [5]

The differential diagnosis of nasal cavity mass lesions is extensive and includes many inflammatory and neoplastic entities. Nasal polyps are the most common expansile lesions in the nasal cavity. They are associated with allergy, vasomotor rhinitis, and inflammation. Fungal infections, rhinosporidiosis, tuberculosis, Wegener's granulomatosis, and lethal midline granuloma present as nasal cavity soft-tissue mass lesions with variable bone destruction [1]. The diagnosis of nasal chondroma must be considered in the differential diagnoses of midline nasal cavity masses. Surgical excision is recommended treatment for this entity [6]. Definite propensity of recurrence probably in cases where removal is inadequate. In our case in 2 year follow up patient does not have any recurrence. (Fig: 4).



(FIG: 1, 2, 3 & 4)

References:

1. Som PM. Sinonasal Cavity. In: Som PM, Bergeron RT, eds. *Head and neck imaging*, 2nd ed. St. Louis: Mosby, 1991: 114-200
2. Murthy DP, Gupta AC, SenGupta SK, Dutta TK, Pulotu ML. Nasal cartilaginous tumour. *J Laryngol Otol* 1991;105: 670 -672
3. Ringertz N (1938) Pathology of malignant tumours arising in nasal and paranasal cavities and maxilla .Acta otolaryngica supplement (stockh)27:1-405
4. Fu Y-S, Perzin KH. Non-epithelial tumours of the nasal cavity, paranasal sinuses and nasopharynx: a clinicopathological study. III. Cartilaginous tumours (chondroma, chondrosarcoma). *Cancer* 1974;4: 453 -463
5. Tufail Patanakar, Diane Armao and ,Suresh K. Mukherji, Nasal Chondroma. American journal of roentgenology (AJR) April 2000 vol. 174 no. 4 1166
6. Scierski W, Namysłowski G, Misiołek M, Widziszowska A, Hajduk A. [Septal nasal chondroma--a case report]. Otolaryngol Pol. 2007;61(6):1021-3

Date of submission: 01 June 2013	Date of Provisional acceptance: 18 June 2013
Date of Final acceptance: 28 July 2013	Date of Publication: 04 September 2013
Source of support: Nil	Conflict of Interest: Nil