Myxoma of the maxillary sinus

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Abstract

A case of Myxoma involving the maxillary sinus in an 11 year old girl is being reported for its rare occurrence in children.

Key Words

Myxoma ; Maxillary sinus ; Stellate Cells

Osteous myxoma is a benign, slow growing locally invasive tumour of the facial skeleton. It frequently manifests as a slow growing palatal or facial swelling. It usually occurs in adolescents, uncommon in adults and is rare in children.¹

We are reporting a case of myxoma in a young girl of 11 years, keeping in view the rarity of this tumour in children.

Case Report

An 11 year old girl was seen in the ENT outpatient department with the complaint of swelling over the right side of the face for last four months. Patient gave a history of an increase in the size of the swelling for last three months. There was no associated history of trauma, pain, fever or tooth extraction. Physical examination revealed swelling approximately 6 x 7 cm, irregular, overlying the

right maxilla. There was fullness of the right gingivolabial sulcus with the overlying mucosa being intact. Anterior rhinoscopy revealed the lateral wall of the right nasal cavity pushed medially and no other mass seen. The skin overlying the swelling was normal. X-ray of the paranasal sinus showed homogenous opacity of the right maxilla and right nasal cavity. (Fig 1) The fine needle aspiration

Fig I. X-ray of the paranasal sinus showing homogenous opacity of the right maxillary sinus and right nasal cavity.

cytology done of the swelling through the bulge in the right gingivolabial sulcus proved inconclusive. CT scan of the paranasal sinus, however could not be done as patient could not afford it. The general physical examination was normal. After getting the routine investigations, patient was prepared for surgery under general anaesthesia. A provisional diagnosis of a benign pathology was kept. Patient was taken for excision via a sublabial approach. The bony plate was very thin. Myxomatous tissue was found completely

filling the right maxillary antrum and also causing its expansion. The mass was enucleated completely. An antrostomy was fashioned and the removal of the medicated pack was done 48 hours post-operatively. The patient was followed up regularly at weekly intervals and is symptom free. The histopathological examination of the mass removed showed myxoma.

Histopathology

Grossly multiple polypoidal gray white and gelatinous tissue was identified. Microscopically, the polyps consist of loose gelatinous tissue with numerous stellate cells. There is mild to moderate chronic inflammation. At places the overlying epithelium is ulcerated. In rest of the places, the tissues are lined by flattened cuboidal epithelium. (Fig II)

Fig II. Microphotograph showing stellate shaped cells in a myxoid stroma.

Discussion

Virchow in 1871 was first to describe myxomas.² Histologic criteria for diagnosis of myxoma was redefined by Stout.³ Differentiation of the myxomas arising from maxilla and mandible, was first described by Thoma and Goldman.⁴ They were found to constitute 0.1% of all primary bone tumours, the average age of occurrence was 30 years and no sex predilection was observed. It was also reported by them, that these tumours are uncommon in adults and rare in children. In the present case report, we have described a myxoma of the maxilla in an 11 year old girl emphasising the rarity of this tumour in

children. Various studies done in the past have confirmed the rarity of this pathology in children. Dutz and Stout² reported 15 myxomas in children whereas Smith et al⁵ described 27 such cases in children. In a comprehensive review done in 1977⁶, only 20 cases of myxomas were found in patients younger than 18 years.

Osseous myxomas tend to grow within the anatomic boundaries with the displacement of adjacent bony structures. Their predilection is for the bones of the jaws.⁷ Fine needle aspiration cytology was inconclusive in establishment of preoperative diagnosis in the present case. David K Haynes et al⁶ stated that cytological examination by fine needle aspiration can be difficult to interpret, because obtaining an adequate sample from a child in whom the tumour has a bony shell is difficult. Radiological

studies especially CT scan and MRI, are useful in determining the extent of the tumor before surgery.⁶ However, due to unforeseen circumstances, CT scan / MRI could not be done in the present study.

Corrective management of myxoma of maxilla involves a radical primary resection in spite of significant functional and aesthetic sequelae.¹ Enucleation or curettage is inadequate treatment as chances of recurrence with aggressive behaviour are high.⁶ However, in children, to avoid future asymmetries and dental abnormalities, one should try to maintain facial growth centres.⁵ Keeping the above fact in mind, as also the age of the child, complete enucleation of the mass via a sublabial approach was done in this case. Follow up of a patient of myxoma, who has undergone surgery, should be meticulous with regular clinical and radiographic examinations.¹

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