HAEMANGIOMA OF MAXILLARY SINUS

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ABSTRACT : *Though haemangioma of nose is a common tumor, those arising from the paranasal sinuses are not very common. Very few cases have been reported. Because of its rarity under the backdrop of existing literature we are reporting our present case.*

Key words : Epistaxis,Proptosis, Nasal obstruction, Swelling of cheek, Palatal bulge, Nasal endoscopy, Antroscopy, Haemangioma, Expansion of maxillary antrum.

INTRODUCTION

Haemangioma of mucosa of paranasal sinuses are very rare. Eggston and Wolff (1947) reviewed a series of 359 cases of neoplastic diseases of nose and paranasal sinuses - **found** 14 cases of haemangioma - none of which originated from maxillary sinus mucosa.

Fu and Perzin (1974) in their study of 256 cases of nonepithelial tumor of nasal cavity, para nasal sinuses and nasopharynx have found 38 cases of haemangioma - but no case of haemangioma of maxillary or ethmoidal sinuses was found.

CASE **REPORT**

A 30 years male patient (Fig. I) attended in ENT Outpatient's Dept. of Medical College Hospital with recurrent attacks of epistaxis for past 2 years - there was 15 episodes of epistaxis; last 2 episodes were severe and had to be controlled by anterior nasal packing.

Since past *V/i* years he also noticed gradually increasing nasal obstruction on left side; Initially, nasal obstruction was partial but since past' 1 year it became complete.

Since past 1 year he noticed gradually increasing swelling of upper part of left cheek, later on forward and outward displacement of left eye was also noticed.

The patient had mild anaemia. Examination revealed variegated nontender swelling at left infraorbital region, extending to left nasofacial angle. Eyeball was pushed upward, outward and forward. There was no palpable cervical lymph node.

On anterior rhinoscopy - left lateral wall of nose was pushed medially, obstructing proper view to the nasal cavity. Nasal septum was mildly deviated to right side. Posterior rhinoscopy didn't reveal any abnormality. Left side of hard palate was buldged, and on palpation egg-cell crackling was noticed. Gingivo-labial groove on left side was normal without any loosening of teeth. Ophthalmologic evaluation revealed medial movement of the left eye ball was restricted; visual acquity of left eye was 6/9 and that of right eye 6/6. Other cranial nerves were normal. Fundoscopy did not reveal any abnormality. Neurological examination was essentially within normal limits. He was admitted for investigations and surgery. Routine blood test (TC, DC, Hb%, ESR, BT, CT) were suggestive of mild hypochromic normocytic anaemia.

Plain X-ray showed haziness of left maxillary and ethmoidal sinuses. Anterolateral wall of left maxilla was buldged out. CT scan showed homogenous soft tissue shadow in the left maxillary and ethmoidal region, eroding the lamina papyracia and involving the orbit. Nasal septum was mildly deviated towards right side (Fig. II).

FIg. I : Clinical photograph (Pre-treatment)

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Fig. II : Photograph of CT scan

During nasal endoscopy, a small pinkish non-friable soft mass was seen at posterior part of nasal cavity which bled moderately on taking biopsy and controlled by anterior nasal packing.

Antroscopy was done through left canine fossa - a fleshy bleeding mass was seen; biopsy taken from this mass also.

Histopathological examination of nasal mass showed fibrous dysplasia and that of antral mass showed haemangioma.

The mass was enucleated completely through Weber-Fergusson incision with a medial maxillectomy and partial removal of anterolateral wall. During removal, the mass was bled freely but after entire removal of the tumour, there was no abnormal bleeding. Macroscopically, the resected specimen consisted of a very vascular 4 to 5 cm diameter mass. The microscopic appearance of the tumour (Fig.**III)** showed a proliferation of thin-walled blood vessels of different sizes lined by endothelium. Diagnosis of haemangioma was confirmed following histology. There was no evidence of malignancy.

The patient came for follow up after about one year when there was no recurrence and the cavity was well healed. His proptosis also subsided. (Fig.IV)

Fig. III : Photomicrograph (x 90).

Fig. IV : Clinical Photograph (Post treatment)

DISCUSSION

Haemangioma is a benign vascular lesion but whether it is a true neoplasm or a vasoformative disorder - is debatable (Batsakis 1979). But most authors believe that it is a neoplasm.

Over half of all haemangiomas are found in head and neck region and can originate in the skin, mucosae and deep structures such as bones, muscles and glands (Raboso et al, 1979).

Although histological findings of all of them are similar with only minor variations, their clinical features, management and prognosis are different according to their location. Therefore, the classic histological classification of capillary, cavernous, mixed. Juvenile and hypertrophic has no clinical relevance. In fact, they are practically different stages of the same disease process. There is considerable overlap with features of each type, particularly the capillary and cavernous types in any given lesion. Zone of transition lends some support to the supposition that the hypertrophic (Juvenile) form of haemangioma is an immature form of capillary haemangioma and that the cavernous haemangioma, results from "maturation" of the capillary variety (Batsakis, 1979).

Haemangioma of maxillary sinus may originate from the bone or mucosa. They are different in their clinical behaviour, histopathology and treatment (Kalpan et al, 1991; Dillon et al, 1991; Raboso et al, 1997). In haemangioma of mucosal origin, history of epistaxis is more common as in the present case. Histopathological examination shows bony specules along with the picture of haemangioma,if it is of bony origin (Ghosh et al, 1988).

Preoperative histopathological examination of the tissue from nasal mass was fibrous dysplasia. This may be due to hyperaemic decalcificiation of bone (Ghosh et al, 1988).

In bony haemangioma, treatment of choice is maxillectomy but in mucosal haemangioma only excision of the mass - as done in the present case suffices. Laws (1968) reported one case where maxillary haemangioma disappeared without recurrence after a dose of 8300 of Cobalt 60. He believed that surgery is dangerous because of operative haemorrhage. However, some authors believed that preoperative radiotherapy may reduce the vascularity of tumour before surgery (Ahad and Chisti, 1977). Fu and Perzin (1977) recommended limited local excision as treatment of choice in their series of vascular tumours. We have performed local enblock resection of tumour which was cosmetically acceptable.

During enmass removal, the mass bled freely and bleeding stopped after removal of the mass which suggests that the mass has no connection with large vessels, but only to small to medium size vessels for which the mass was not pulsatile and throbbing (Das et al,1991).

Raboso et al (1997) opined that surgical approach should be chosen after radiological assessment of the extension and vascular supply keeping in mind that profuse bleeding might be expected and an unrestricted field of view is advisable in order to control the haemorrhage. Blood transfusion should be planned in advance.

So, in cases of clinical benign nasal / naso-maxillary tumour, if the tumour bleeds profusely during biopsy, we may suspect benign tumors in relation to vascular channel where repeat biopsy or excisional biopsy in the posto-perative period may confirm the diagnosis. In these types of cases, preoperative angiography may be of immense value.

In our opinion, treatment of haemangioma originating from maxillary sinus mucosa should be surgical excision because peroperative bleeding can be controlled by packing the cavity after removal of the mass. Radiotherapy should be avoided to reduce radiation induced head and neck malignancy in later period.

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