Intraosseus Haemangioma of the Nasal Bone

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A case report of an Intraosseous Haemangioma of the nasal bone was presented and the relevant literature was reviewed. The tumour was removed in toto using a modified spectacle incision and sent for histopathogical study.

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Intraosseous Haemangioma of the nasal bone is rare benign tumour of the nasal bone. Only 27 cases have been published in the world literature. Due to its rarity it often causes a diagnostic challenge to the ENT surgeon^{1,2}. We report a case of Intraosseous Haemangioma, highlighting its clinical presentation, diagnosis, pathology, management and review of literature.

CASE REPORT

Seven years old Saudi girl from northern part presented to our Out Patient clinic complaining of a painless, slowly growing swelling over the right side of the bridge of her nose of 6 months duration. The swelling started small (the size of a peanut) and increased rapidly over the last 2 months. There is no history of trauma, accidental or surgical, epistaxis, nasal obstruction or allergy.

The swelling had no effect on the general condition of the patient, and no similar swelling were noted any where else on the body.

On examination a cystic, fluctuant non compressible swelling about 2 cm in diameter was palpable on the right site of the nasal bridge. It had a well defined irregular bony margin. It was non tender, not hot and the overlying skin was unaffected. All other ENT, Head and Neck and eye examinations were normal.

Plain x-ray of paranasal sinuses showed a radiolucent bony lesion with trabeculations in the center and well demarcated thickened right nasal bone (Fig 1). CT scan of the nose and paranasal sinuses (Fig. 2,3) showed a swelling arising from the right side of the nose causing expansion of the nasal bone and giving a "volcano eruption" or " sun burst" appearance.

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Fig 1. Plain x-ray of paranasal sinuses, showing radiolucent bony lesion with trabeculation in the center and bony demarcation around it. Fig 2. CT scan of nose showing defect in right nasal bone with trabeculation.

Fig 3. C.T. scan of nose and paranasal sinuses showing expansion of right nasal bone and the "Volcano eruption" appearance.

Fig 4. Modified spectacle incision.

Surgery

Under general anaesthesia a modified spectacle incision (Fig.4) was made in order to avoid scarring. The mass was soft, fluctuant and brownish in color. The blood supply at the base was ligated and the mass removed in-toto and sent for histopathology. The cavity was curreted, cleaned and the bony margins smoothened. The defect was filled by conchal cartilage and the wound closed by continuous intradermal stitches. Recovery was uneventful and patient was discharged. A follow-up after 3 months showed no evidence of recurrence.

Fig 5. Histopathology of specimen demonstrating endothelial-lined vascular spaces with scattered pieces of bone. Histopathology revealed large vascular spaces with endothelial lining giving the impression of venous channels, with scattered pieces of bone and cartilage (Fig.5). Some of these vascular spaces showed papillary projection due to organization of haematomas.

DISCUSSION

Haemangioma of the bone is a rare benign tumour accounting for less than 0.8 per cent of primary bone neoplasm³. Intraosseus haemangioma of the nasal bone are extremely rare. In a series of 45 patients with haemangioma of bone, Sherman and Wilner (1961) found one involving the nasal bone⁴. Osborn (1959) reviewed over 50 patients with nasal haemangiomas over a 11 year period and none involved the nasal bone⁵.

The first report was written by Nievert and Bilchick (1936) and review of the subject was undertaken by Bridger $(1976)^{6.3}$. Intraosseus haemangioma of the nasal bone characteristically presents as a slowly enlarging mass at the root of the nose and usually reaches a maximum size of 2 cm at time of diagnosis¹. Usually they are unilateral. They are asymptomatic, affecting young and middle age group without sex predominance. The swelling is usually bony with some fluctuation in center and normal skin over it. The x-ray appearance of the lesion is very characteristic with trabeculations and/or radiation from a central point, within an oval radiolucent area, giving the "Sun burst" appearance. The "honey comb" pattern can also be seen on CT scan of the nasal bone^{1,7,8}.

The treatment of choice is excision with or without reconstruction of the defect. The long term results are very good and the recurrence is rare.

CONCLUSIONS

Intraosseus Haemangioma is rare benign tumour of the nasal bone. It is slowly growing and unilateral. On x-ray it shows "sun burst" appearance. Treatment is usually surgery.

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