

View from Beneath: Pathology in Focus

Nasal bone haemangioma

H. Y. KAPLAN, M.D., A. KESSLER, M.D.,† M. FEIBEL, M.D.,* D. NASS, M.D.,** H. TSUR, M.D. (Tel Aviv, Israel)

Introduction

Haemangioma of the nasal bone is a rare benign bone tumour. Approximately 25 cases have been published in the world literature. Although the radiographic findings are pathognomonic, it is frequently misdiagnosed pre-operatively (Bucy and Capp, 1930). We present another case of nasal haemangioma in a 20-year-old female.

Case report

A 20-year-old female was referred to us having noticed a slow growing mass on the lateral aspect of the left nasal bone. The tumour mass caused increasing discomfort while wearing sunglasses. There was no pain, no history of trauma, or previous nasal surgery. The patient had been aware of the lesion for the last two years, as it grew slowly in size.

On examination a hard, non-tender mass 1.2 cm in diameter was palpable on the left nasal bone close to the inner canthus (Fig. 1). The overlying skin was unaffected. Intranasal examination and radiographic evaluation of the paranasal sinuses was normal. Lateral plain radiography of the nose showed a radiolucent bone lesion with reticular soap bubble texture (Fig. 2). A CT scan of the left nasal bone demonstrated the classical picture of 'sunburst pattern' (Fig. 3).

Under local anaesthesia through a small vertical incision, the tumour was easily identified; macroscopically it appeared as a small vascular lesion. Following removal of the tumour, a 1.5 cm defect was left in the bone. The latter was not grafted and the skin was closed primarily. Recovery was uneventful



FIG. 1

Asymmetry of the nasal bone caused by the tumour mass.

(Fig. 4). Eighteen months later there was radiological evidence of the bony defect, but no recurrence of the tumour (Fig. 5).

The pathological specimen showed aggregation of small blood vessels adjacent to the bony trabeculum which is diagnostic for bone haemangioma (Fig. 6).

Discussion

Haemangiomas of bone comprise 0.7 per cent of all bony neoplasms (Bridger, 1976). Nasal bone haemangiomas are extremely uncommon. In a series of 69 skeletal haemangiomas



FIG. 2

Lateral radiograph of the nasal bone showing the fine reticular osteolytic lesion.

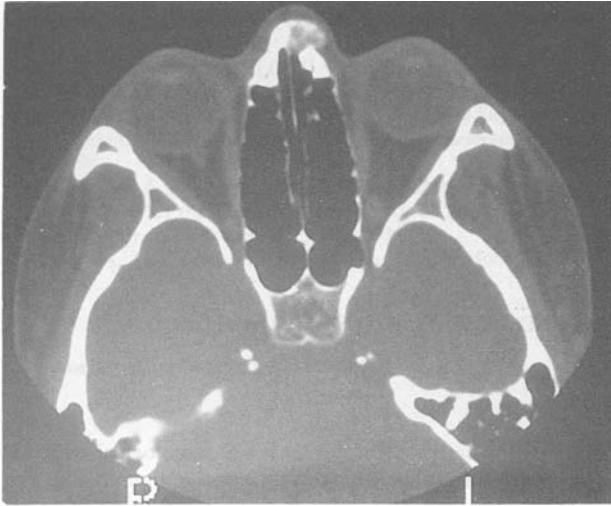


FIG. 3

CT scan showing the typical 'sunburst appearance' of bony haemangioma.



FIG. 4

The operated site at 18 months follow-up.



FIG. 5

X-ray of the nasal bone at 18 months, the bony defect is visualized.

(Dahlin (1978) did not find any case involving the nasal bones. The first description was by Neivert and Bilchik (1936). Approximately 25 cases have been described in the Western literature (Siegelman *et al.*, 1968; Hirshowitz and Munk, 1973; Bridger, 1976; Zizmor *et al.*, 1978; Livia, 1979). The patient we have described had no nasal trauma, nor previous surgery. The lesion was present for two to three years before it was diagnosed. A CT scan tomography showed the classical 'sunburst' picture and helped to define the extent of the tumour (Pope *et al.*, 1986).

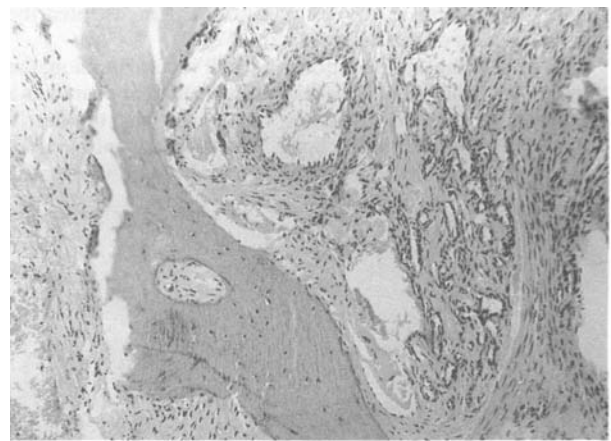


FIG. 6

Microscopic view of the pathological specimen showing typical aggregation of small blood vessels.

The treatment of these tumours is conservative excision; most authors have used bone grafts to fill the defect (Hirshowitz and Munk, 1973). In this patient no bone graft was used. At a year's follow-up there is no detectable recurrence of the tumour and no aesthetic deformity. The defect was small and we assume that the organizing haematoma induced bone formation. Similar experience has been reported by Kanter *et al.* (1985). On 18 month follow-up there was almost no detectable scar. There was no visual or palpable deformity, but on X-ray (Fig. 5) there was a smooth round bony defect. The haema-

toma may have initiated fibrosis but no bone formation. It is interesting to note that among the 25 cases reported in the literature, three have been described in Israel (Hirshowitz and Munk, 1973; Livia, 1979).

References

- Bridger, M. W. M. (1976) Hemangioma of the nasal bone. *Journal of Laryngology and Otology*, **90**: 191–199.
- Bucy, P., Capp, C. S. (1930) Primary hemangioma of bone with special reference to roentgenology. *American Journal of Roentgenology*, **23**: 1.
- Dahlin, D. C. (1978) Bone tumors—general aspects and data on 6221 cases. Charles C. Thomas: Springfield, Illinois. p. 137–148.
- Hirshowitz, B., Munk, J. (1973) Cavernous haemangioma of the nasal bone. *British Journal of Plastic Surgery*, **26**: 81–83.
- Kanter, W. R., Brown, W. C., Noe, J. M. (1985) Nasal bone hemangioma: A review of clinical, radiologic and operative experience. *Plastic and Reconstructive Surgery*, **76**: 774–776.
- Pope, L. T. Jr., Fechner, R. E., Keats, T. E. (1986) Case report 367. *Skeletal Radiology*, **15**: 327–329.
- Livia, W. S. (1979) Giant cavernous haemangioma of the nasal bones. *British Journal of Plastic Surgery*, **32**: 315–317.
- Neivert, H., Bilchik, E. B. (1936) Primary hemangioma of the nasal bone. *Archives of Otolaryngology*, **24**: 495–501.
- Siegelman, S. S., Frankel, T. N., Lewin, M. L. (1968) hemangioma of the nasal bone. *Archives of Otolaryngology*, **88**: 269–272.
- Zizmor, J., Robbett, W. F., Spiro, R. H., Ganz, A., Tawfik, B. (1978) Hemangioma of the nasal bones: Radiographic appearance. *Annals of Otology, Rhinology and Laryngology*, **87**: 360–363.

Address for correspondence:

H. Y. Kaplan, M. D.,
Department of Plastic Surgery,
The Chaim Sheba Medical Centre,
Israel.

Key words: Haemangioma, nasal bone

