Benign Fibrous Histiocytoma of the Maxillary Sinus

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Fibrous Histiocytoma is an uncommon neoplasm of the Head and Neck region and quite rare in the paranasal sinuses. We are reporting a case of Benign Fibrous Histiocytoma in the Maxillary sinus from the Department of Otorhinolaryngology of Bolani Hospital, Bolani with a description of clinical and histological features of the neoplasm.

CASE REPORT

D. G. (fig.1) a 55 years old female patient presented to the E.N.T. Department on 16.09.92 with the complaints of unilateral nasal obstruction, post nasal drip and occasional bleeding per nose of 6 months duration, Anterior and posterior rhinoscopy revealed a greyish white polypoidal mass in the left nasal cavity extending up to the choana. X-ray of paranasal sinuses showed a hazy left maxillary sinus with no destruction of its bony walls. X-ray chest, routine haematocrit, urine examination, and blood sugar levels were within normal range. A diagnosis of Antrochoanal polyp was made provisionally and the patient underwent a Cald-well Luc operation with nasal polypectomy and antrostomy with a complete removal of the antronasal mass. The antral specimen was firm elastic greyish white mass which on histological examination proved to be Fibrous Histiocytoma. The post operative period was uneventful. The patient is free of recurrence two years after surgery.

HISTOLOGY

Microscopically the specimen was marked with cells of fibroblastic and histiocytic pattern. The fibroblasts were elongated in shape arranged in distinct interlacing bundles showing typical

stroiform patterns (fig.2). The histiocytes were typical round to polygonal cells with abundant vacuolated cytoplasm with occasional

Fig.1

Clinical Photograph of Patient

multinucleate giant cells. The cells were of uniform pattern with minimal mitotic figures and atypia. The overall picture was essentially one of benign type.

DISCUSSION

Fibrous Histiocytoma has a plethora of synonyms (21 names are cited by Blitzer et al. 1977). It is established by immunohistochemical studies that the lesion originates from fibroblasts rather than from histiocytes (Enzinger and Weiss 1988). The neoplasm usually arises from the connective tissues of extremities and the retroperitoneum. Only 3% cases involve the Head and Neck region (Weiss and Enzinger 1978). Blitzer et al. (1977) recorded 32 cases of fibrous histiocytoma in the

Head and Neck region including three of their own case reports.

benign from the malignant types yet an intermediate group is described in which it is

Fig.2

Photomicrograph of Tumour (H & E stain) 200 X Showing Stroiform pattern fibroblasts, Histiocytes and Giant cells

Townsend et al. (1974) first reported two cases of fibrous histiocytoma in the paranasal sinuses. Spector et al. (1974) reported one case of malignant fibrous histiocytoma in the maxilla. Rice et al (1974) reported three cases of malignant type in the paranasal sinuses one of which had positive lymph nodes. Lesica et al. (1975) reported malignant fibrous histiocytoma of ethmoids which recurred after 9 years. A case of malignant type was reported by Brookes and Rose (1983) of the ethmoid sinus which recurred 8 months after treatment with radiotherapy and chemotherapy. Mugliston et al. (1984) and Crissman et al. (1978) reported cases of malignant fibrous histiocytoma of the maxillary sinuses.

The peak incidence of disease is in the sixth decade with a male predominance, Weiss and Enzinger (1978). The tumour presents as a painless mass, bleeding being a rare feature, Blitzer (1977).

The histological features although distinguish

difficult to determine the biological behavior of the lesions, Soule et al. (1972) termed them as Atypical Fibrous Histiocytoma. In 50% of the excised neoplasms recurrence occurred with a 5 years survival rate of 90%.

In our case the patient underwent complete excision of the tumour mass. The histology showed typical stroiform patterns and cells showed minimal atypia and mitotic figures, yet it is difficult to draw a clear cut demarcation line between benign and malignant histiocytomas on the basis of histology alone (Ozello et al. 1963) Histologically the benign form may recur and metastasize. The mitotic index may not be the true indicator of aggressiveness the malignant nature being better assessed by the size of the tumour mass (O'Brien and Stout, 1967). The patient is free of disease two years after surgery yet long term follow up at regular intervals is required in this case looking to the recurrence in the other cases as depicted in the literature.

References

1. Blitzer, A.; Lawson, A. and Biller, H.F. (1977) : Malignant fibrous histiocytoma of the Head and Neck. *Laryngoscope*, 89 : 1479-1499.
2. Crissman, J.D. and Henson, S. L. (1978) : Malignant fibrous histiocytoma of Maxillary sinus. *Archives of Otolaryngology*, 104 : 228-230.
3. Brookes, G. B. and Rose, P.E. (1983) : Malignant fibrous histiocytoma of the ethmoid sinus. *Journal of Laryngology and Otology*, 97 : 279-289.
4. Enzinger, F. M. and Weiss, S. W. (1988) : *Soft tissue tumour*. C. V. Mosby and Co., St. Louis, P 280.
5. Mugliston, T. A. H. and Shaw, H. J. (1984) : Malignant fibrous histiocytoma of maxillary sinus. *Journal of Laryngology and Otology* 98 : 153-157.
6. O'Brien, J. E. and Stout, A. P. (1964) : Malignant fibrous xanthoma, *Cancer*, 17 : 1445-1455.
7. Ozello, L., Stout, A. P. and Murray, M. R. (1963) : Cultural characteristic of malignant histiocytoma and fibrous xanthoma, *Cancer*, 16 : 331-334.
8. Rice, D. H., Batsakism J. G., Headington, J. T. and Boles, R. (1974) : Fibrous histiocytoma of the nose and paranasal sinuses. *Archives of Otolaryngology*, 100 : 398-401.
9. Soule, E. H. and Enriquez, P. (1972) : Atypical fibrous histiocytoma, Malignant fibrous histiocytoma and epithelial sarcoma. A comprehensive study of 65 tumours. *Cancer*, 30 : 128-143.
10. Spector, G. J. and Ogura, J. H. (1974) : Malignant fibrous histiocytoma of maxilla. *Archives of Otolaryngology*, 98 : 51-52.
11. Townsend, G. L., Neel, H. B. and Weiland, L.H. (1973) : Fibrous histiocytoma of paranasal sinuses. *Archives of Otolaryngology*, 98 : 51-52.
12. Weiss, S. W. and Enzinger, F. M. (1978) : Malignant fibrous histiocytoma – an analysis of 200 cases. *Cancer*, 41 : 2250-2266.