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Naso-pharyngeal fibromyxoma

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Myxoma was first defined by Virchow in 1871. It was described as a tumour resembling premature embryonic mesenchyme. Stout in 1948 published a paper stating criteria for the recognition of myxomas. It is a tumour composed of stellate and spindle-shaped cells set in a myxoid stroma containing mucopolysaccharide, through which course very delicate reticular fibres in various directions.

They are usually of mixed type, for example: fibromyxoma, lipomyxoma, fibrolipomyxoma or chondromyxoma (Geschickter and Copeland, 1936).

We will describe a case of fibromyxoma which presented in the naso-pharynx.

Fibromyxomas are uncommon, slowly growing, stubbornly infiltrative neoplasms.

They have been described at various sites of soft tissues as well as in the facial bones.

Origin: They are mesenchymal in origin but an odontogenic origin has also been postulated (Gorlin *et al.*, 1961). The tumour is composed of fibrous and myxomatous elements containing strands of collagenous fibrous tissue, with spindle and stellate cells in a myxoid stroma. These tumours are poorly vascularized and behave as benign, slowly-growing locally infiltrative neoplasms.

Metastases have never been recorded.

Their histological appearance makes them very difficult to differentiate from a malignant neoplasm and present a considerable problem for treatment (Dutz and Stout, 1961).

Fibromyxomas appear infrequently in the facial bones and para-nasal sinuses but have never been recorded in the naso-pharynx. A review of the literature revealed only one case of an antral fibromyxoma presenting as a giant nasal polyp (Bochetto *et al.*, 1967).

Case Report

R.F., a 75-year-old male, was referred to the Department of E.N.T. at Bury General Hospital in May 1979 with a history of nasal obstruction, slight dysphagia and deafness of six month's duration.

Clinical examination revealed a large mass roughly 8×4 cms. occupying the whole of the naso-pharynx and extending to the oropharynx, pushing the soft palate forwards. It was fiixed to the posterior pharyngeal wall and had a firm consistency, and the covering mucosa was smooth and intact. There were no palpable glands in the neck or other regions. Anterior rhinoscopy was normal. The right middle ear showed evidence of a fluid level.

Haematological and biochemical investigations were normal. Radiography confirmed the clinical findings. Tomography of the naso-pharyngeal region confirmed the presence of a large mass filling the naso-pharynx and extending into

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the oropharynx. There was no evidence of bony erosion but the centre of the mass was calcified (Fig. 1).

The patient was examined under general anaesthesia, and the clinical findings were confirmed. A biopsy was taken from the anterior part of the oropharyngeal extension of the tumour. A nasogastric tube was passed with great difficulty as the tumour was filling the whole of the naso-pharyngeal space. Tracheostomy was performed.

Histology of the biopsy material showed a spindle-cell tumour with a moderate nuclear pleomorphism and occasional mitoses. This was thought to be a low grade malignant tumour and the patient was treated with local radiation. However, there was no sign of improvement or regression in the size of the tumour two months after radiotherapy.

Operative Procedure

Surgical excision of the tumour was planned. Because of the extensive nature of the tumour we felt that Wilson's transpalatal approach would be quite inadequate for total excision. A vertical incision was made along the right side of the uvula and the soft palate was split up to the palatine bones. Lateral retraction of the soft palate gave us an adequate approach to the tumour. The whole mass was excised and the mucosa of the posterior pharyngeal wall sutured.

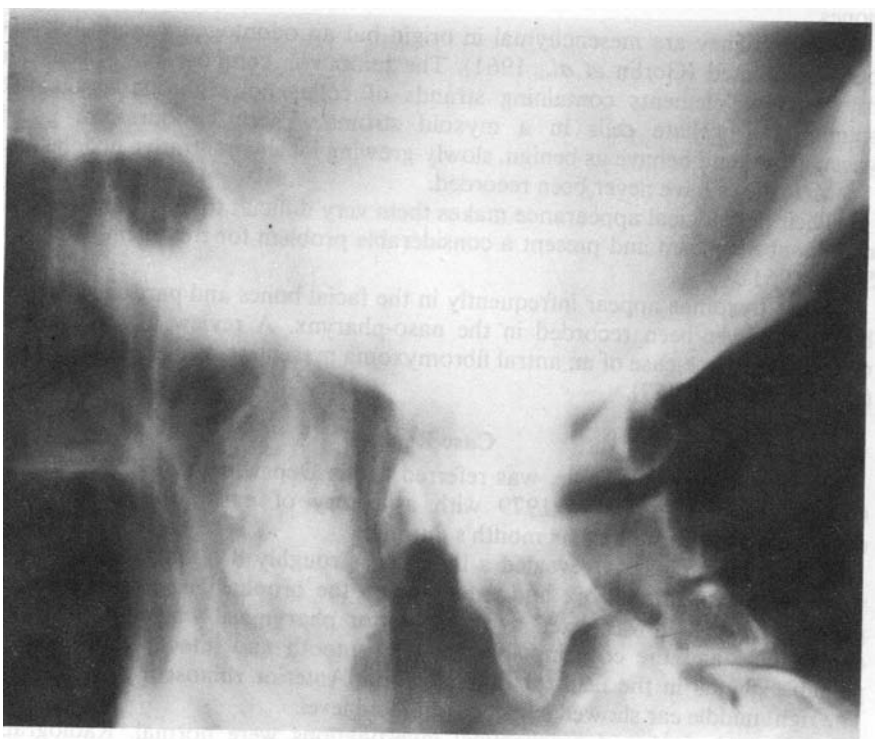


FIG. 1

Pre-operative tomogram of the nasopharyngeal region showing the extensive nature of the tumour.

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The palate and pharyngeal wall healed satisfactorily and there has been no evidence of recurrence eight months after surgery.

The patient remained well and symptom-free for two years but, when examined in September 1981, there was a suspicion of recurrence in the post-nasal space; however, because of a recent myocardial infarction, no further surgery is contemplated.

Histology of the tumour showed features of fibromyxoma (Figs. 2 and 3).

Discussion

Fibromyxoma is a rare connective-tissue tumour whose cell of origin is the fibroblast; it displays fibrous and myxoid or mucoid features.

This tumour is widely distributed in the body, as is the mesenchymal connective tissue from which it originates.

It is solitary, non-capsulated, grows fairly slowly, and seldom attains a great size. When it occurs in the facial bones, it causes bony expansion with secondary facial distortions. It does not metastasize but it is a troublesome lesion in that it is stubbornly infiltrative and frequently kills by local invasion. Recurrence is likely if the tumour is not removed completely.

Fibromyxoma of the naso-pharynx and para-nasal sinuses may present with various clinical features related to the ear, nose, throat and eye.

Macroscopically, it is firm-to-soft in consistency. Microscopically, it shows a partly myxoid and partly fibromatous pattern containing spindle, stellate and elongated cells. Moderate nuclear pleomorphism and occasional mitoses are noted.

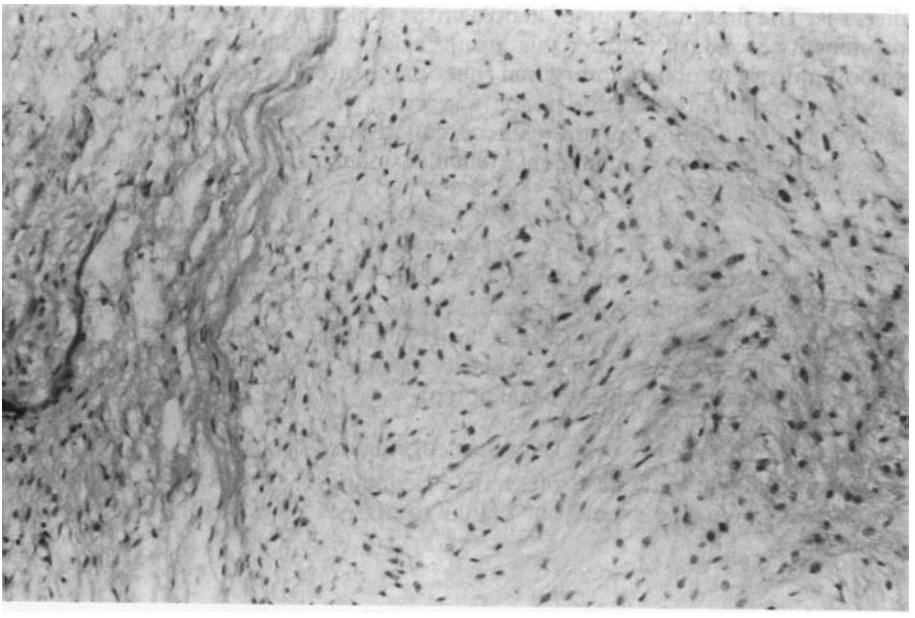


FIG. 2

Histological section of tumour showing stellate cells in a loose mucoid stroma.

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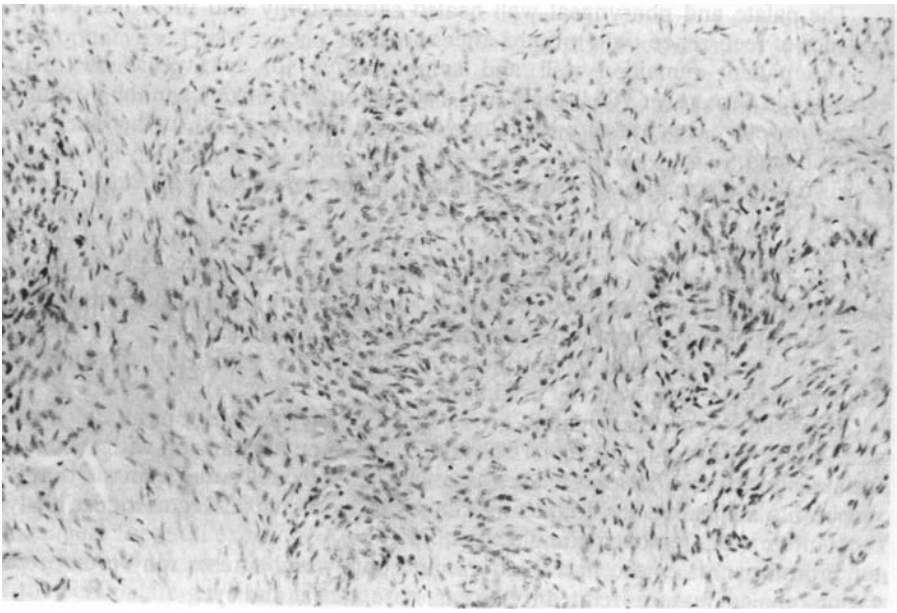


FIG. 3
Histological section showing the fibrous nature of the tumour.

The differential diagnosis of fibromyxoma should be made with two groups of diseases. The first in a group of neoplasms in which myxomatous change can be a prominent secondary feature; this group includes liposarcoma, chondrosarcoma, smooth muscle tumours, embryonal rhabdomyosarcoma and neurofibroma.

The second group consists of a variety of conditions resulting in focal mucinous degeneration of the skin or soft tissues, such as localized myxoma, mucous (mucoid) cyst, ganglion, follicular mucinosis (alopecia mucinosa) and papular mucinosis.

Summary

A case of fibromyxoma of the naso-pharynx is presented as it is extremely rare and gives considerable difficulties in diagnosis. To our knowledge a naso-pharyngeal fibromyxoma has not been published previously. The presenting features of our case have some similarity to that of Bochetto's case (antral fibromyxoma presenting as a giant nasal polyp).

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