Pleomorphic Adenoma of the Nasal Septum

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Key Words

Pleomorphic adenoma, nasal septum

INTRODUCTION

Pleomorphic adenoma is the most common benign glandular tumour of the head and neck. Its usual sites are the parotid gland, submandibular gland and palate. On rare occasions these tumours arise in other sites. Intranasal examples are particularly unusual and only a small number of pleomorphic adenomata originating on the nasal septum have been reported in the world literature¹⁻⁸. We report the presentation and management of a case of pleomorphic adenoma of the nasal septum. The characteristic and distinct histological nature of nasal septal pleomorphic adenoma and the consequent importance in diagnosis are described.

A CASE REPORT

An 82 year old woman with known dementia presented with a year's history of fullness and bulging of the left side of the nose. There were no symptoms of pain, nasal discharge or epistaxis. Her past medical history included treated tuberculosis, hypothyroidism and hypertension. There was no history of previous rhinological disease or regional irradiation. Examination of the nasal cavity revealed a large well-defined mass in the left anterior nasal cavity approximately 4 cm in diameter. Other head and neck examination was unremarkable and in particular there was no associated lymphadenopathy. A biopsy was taken in the clinic and the histology report suggested a

differential diagnose of mucoepidermoid carcinoma or pleomorphic adenoma.

An axial CT scan of the nose and paranasal sinuses reported the anterior nares to be enlarged on the left side by a mass extending from the cartilaginous septum to the floor of the ethmoid sinuses. The nasal septum appeared bowed and the lateral nasal wall expanded. The lesion was shown to have well-defined margins (Fig.1)

A lateral rhinotomy approach was used to excise the tumour. At operation a 4 by 3 cm well-defined

Fig.1

Axial CT scan indicating extent of the intranasal lesion

lesion was found attached to the nasal septum by a broad base. The whole tumour was removed.

Histology sections showed epithelial cells associated with a chondroid and myxoid stroma. The epithelial cells were arranged in irregular masses and groups, some encasing eosinophilic material and others enclosing cystic spaces. This pattern is consistent with a benign pleomorphic adenoma (Fig 2). There was no evidence for a muco-epidermoid carcinoma.

Fig.2

Macroscopic appearance of the specimen together with the microscopic view of a cellular myxo-chondromatous matrix characteristic of pleomorphic adenoma of the nasal cavity

DISCUSSION

Pleomorphic adenomas from 60% of all salivary gland tumours. They are commonest in the parotid, where they form 90% of all benign tumours. The peak incidence is in the fifth decade and the usual presentation is that of a slow growing, painless lump. It is very rare for a pleomorphic adenoma to develop in the nasal cavity^{9, 10}. In 1977 Compagno and Wong undertook a review of the files of the Armed Forces Institute of Pathology and found 40 cases over a period of 25 years¹¹. The patients ages ranged from 3 to 82 years, although most were between 30 and 60 years, and 75% presented with nasal obstruction. The tumour was usually described as a broad based, ovoid, mucosa

covered mass originating in the nasal septum (25 cases). In 7 cases the tumour arose from the lateral nasal cavity. All patients were treated surgically, most often via a lateral rhinotomy approach. Thirty one patients were followed up for three or more years and 3 of these had recurrences thought to be due to inadequate excision. They also reported that histopathologically pleomorphic adenoma of the nasal cavity have less stroma and greater cellularity than those in salivary gland, which may lead to misdiagnosis. Several authors have performed long term surveys which give an idea of the incidence of these tumours Harrison¹² reports 16 pleomorphic adenoma of 545 benign tumours arising in the nasal cavities over a period of 20 years.

Some papers have been published that suggest these tumours have the potential to metastasise. A literature review by Chen described 8 cases of metastasising pleomorphic adenoma¹³. All these tumours originated in the parotid gland and the predominant metastatic site was bone, although lung, lymph node and the liver were also involved. There has only been one reported case of metastasis from the nasal cavity¹⁴. In this case the patient presented with a recurrent septal pleomorphic adenoma plus metastasis to the ipsilateral submandibular lymph node.

Only two histopathologically confirmed examples of carcinoma ex-pleomorphic adenoma of the nasal mucosa have been reported both arising from the nasal septum. This clinical entity is rare, occurs in 6.2% of all mixed tumours and is considered a "medical curiosity"¹⁵.

Recurrence of tumours is a recognised complication. In the case review by Compagno and Wong the rate of recurrence was 10% – the average follow up period being 7.5 years¹¹. Histologically tumours with a myxoid stroma appear to be more frequently associated with recurrence¹⁶. This is assumed to be due to the potential for seeding at operation.

In conclusion, pleomorphic adenomata of the nasal cavity are rare lesions with a characteristic

clinical presentation. They differ from salivary gland tumours in other sites by their cellularity and this may lead to initial confusion regarding diagnosis. Essentially benign lesions, treatment of choice is local excision, but the potential for recurrence must not be forgotten.

SUMMARY

Pleomorphic adenoma of the nasal septum is a rare finding in ENT practice. We present such a

case and discuss the relevant and peculiar histological findings, together with a brief description of the management and potential complications of such tumours.

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