Benign Mixed Tumour (Pleomorphic Adenoma) of the Nasal Cavity

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Abstract

The glandular tumours of the nasal cavity are less common when compared to epithelial neoplasms. Mixed tumours similar to salivary gland neoplasms are still rare^{3,4}. Hence, no large series exist in the literature except an occasional one¹. Because of high cellularity with scant stroma, these tumours are usually mistaken as more aggressive neoplasms. Follow up data (Mean - 7.5 years) from a large series,¹ 31 out of 34 cases for whom data was available showed no recurrence. Hence radical surgeries are unwarranted. We are, herein, reporting a case of intranasal mixed tumour which in contrast to earlier studies, showed more myxoid stromal areas with interspersed small epithelial nests.

Keywords

Mixed Tumour ; Pleomorphic Adenoma; Nasal Cavity Tumours

A 48 year old Muslim female patient came with complaints of a slowly enlarging polypoidal mass with obstructive symptoms in the left nostril of six months duration, but no history of epistaxis. She was a known patient of allergic rhinitis for which she was taking anti-allergics for the past twenty years. There was no history of prior intranasal surgery and no family history of similar problem. X-ray nose and para-nasal sinuses revealed an expanding soft tissue intra-nasal mass on left side without sinus involvement. The tumour was removed by wide surgical excision with a provisional clinical diagnosis of "Allergic Polyp" and sent for histopathological examination. During surgery the tumour was found to originate from the mucosa of the bony nasal septum.

Grossly, the tumour was a sessile, polypoidal, greyish white, firm, slimy, slightly lobulated mass of 1.5 x 1 x 0.6 cm size. Cut surface was greyish white, firm with interspersed tiny haemorrhagic areas but no necrosis. Histologically, a well delineated tumour reminiscent that of pleomorphic adenoma of salivary gland was seen beneath nasal lining epithelium (Fig.1) which at areas was ulcerated. The tumour was composed of large areas of myxoid stroma with

interspersed cellular areas comprising of small oval to slightly elongated epithelial cell nests with dark uniform nuclei arranged in cords, nests and as tiny ductal structures (Fig. 2). Pseudochondroid areas and hyalinization of stroma were also present. There was no anaplasia, mitosis or necrosis. A diagnosis of *Benign Intranasal Mixed Tumour* was made and suggested to follow up the patient for any recurrence because of more stromal component.

Fig. 1. Showing intact surface pseudostratified ciliated columnar epithelium with a small portion of the tumour (arrow). (H & E x 40)

Fig 2. Showing a portion of the tumour with loose myxoid stroma and epithelial nests at areas forming tiny ducts. (H & E x 100)

Discussion

From a histologic and tumourigenic stand point, the sinonasal seromucus glands are tantamount to minor salivary glands. Hence, sinonasal glandular tumours are almost identical to salivary gland tumours microscopically. Despite the large number of seromucus glands in the nasal cavity, only a small number of isolated cases of mixed tumours can be found in the literature except an occasional large series¹. This indicates the rarity of the lesion in this location. Among 311 sinonasal glandular tumours reported by Armed Forces Institute of Pathology from 1976 to 1985, mixed tumours amounted to 73 (23.47%)³.

They are observed in the age groups of 2nd to 8th decade without any significant sex difference. The

patients usually present with unilateral nasal obstruction, a polypoidal mass and / or epistaxis for an year or less^{1,2,4}. About three fourths of these tumours originate from the mucosa of the bony or cartilagenous septum and only one fourth occur on the lateral nasal wall though majority of seromucus glands are located at this site^{1,3}. Physical examination usually reveals a polypoidal exophytic firm grey white to grey pink mass ranging in size from 0.5 to 7 cm; often covered with intact mucosa.

Histologically, although similar to mixed tumours of the major salivary glands, these tumours differ by being highly cellular (epithelial element) with little or no stromal component, hence stimulate more aggressive tumours^{1,2,3}. In contrast, the present case showed more stromal component with scattered small epithelial islands. The usual high cellularity, piecemeal removal of the tumour and the rarity with which these tumours are seen in many surgical pathology labs are the factors predisposing to misdiagnoses such as benign and malignant mesenchymal tumours. Immunohistochemistry, especially low molecular weight keratins can be helpful in differentiation^{1,3}.

Removal of these lesions by local but adequate surgical excision is the treatment of choice. Although these tumours are large and removed in piecemeal, recurrences are infrequent. These low recurrent rates, i. e. 10% in one large series presumed to be due to uncommon myxoid stroma in these lesions^{1,4}. As the present case is rich in stromal component, we advised the surgeon to closely follow-up the case for any recurrence.

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