

Pleomorphic adenoma of the upper lip: A case report

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Abstract:

This case report describes a rare and unusual lesion found in 27 year old female, which was diagnosed as pleomorphic adenoma of the minor salivary glands in the upper lip. The tumor was a circumscribed, large firm mass, about 5 cm in diameter, almost obstructing the nasal vestibule and characterized by slow growth. Complete excision was performed and the histopathological analysis showed pleomorphic adenoma. The tumor did not recur. A brief review of the relevant literature is also presented.

Keywords: *Pleomorphic adenoma; minor salivary gland tumors, nasal vestibule.*

Introduction

The most common salivary gland tumor is Pleomorphic adenoma (PA), which accounts for 60-65% of such diseases. It mainly affects women in their fourth to sixth decade of life, and has a natural history of asymptomatic slow growth over a long period.¹ It usually involves major salivary glands, most commonly being the tail of parotid. It also involves minor salivary glands. The lips are commonly affected sites, second only to the palate, and accounting for about 20-40 % of all intraoral Pleomorphic adenoma.^{2,3}

The aetiology of PA is unknown. It is epithelial in origin, and clonal chromosome abnormalities with aberrations involving 8q12 and 12q15 have been described.⁴

This paper describes the diagnosis and management of an asymptomatic, slowly growing, pleomorphic adenoma in the upper lip of middle aged female. A brief review of the relevant literatures is also presented

Case report

A 27-year old female presented in ENT O.P.D. of this hospital with a complaint of painless, mobile lump in upper lip. The mass slowly increased in size during the past 3 years. At the time of presentation, nasal vestibule was almost obstructed by the mass as shown in fig-1. On examination, the mass was circumscribed, mobile, sessile, and rubbery in consistency and 4.5- 5 cm in diameter as shown in fig-2. The overlying mucosa was smooth with pinkish-purple color showing evidence of superficial vascularity. Skin over the tumor was not fixed. There was no pain or bleeding on palpation. Head and neck abnormalities were not noted on clinical examination. The medical history was unremarkable, and no other abnormalities were found on clinical examination. Thus, the clinical diagnosis was benign minor salivary gland tumor. FNAC showed the features of pleomorphic adenoma.

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Fig-1



Fig-2

The tumor was completely removed with lip splitting incision as shown in fig-3. During the surgical procedure, the lesion was excised without difficulty with clinically normal margin because the mass was fully encapsulated. Subsequent follow up after one year showed no signs of recurrence.



Fig-3



Fig-4

Histopathological analysis of the surgical specimen revealed pleomorphic adenoma and there was no evidence of malignancy. Fig-4 is 7th post-operative day photo of the same patient.

Discussion

Kroll and Hick ⁵ reviewed 4042 cases of pleomorphic adenomas of the salivary glands. Of these, 445 originated in the minor salivary glands, only 16.9% were located in the upper lip and 2.9% in lower lip. Pleomorphic adenoma in the upper lip exceeds that of the lower lip by the ratio of 6:1. The reason for this

difference has been thought to be due to the differences in embryonic development between the upper and lower lips.

Pleomorphic adenoma arising from minor salivary glands of the lips tends to occur at an earlier age than it does at other sites. Bernier ⁶ found that the peak incidence of pleomorphic adenoma of the lips was in

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the third and fourth decades, with an average age of 33.2 years. There is a propensity for benign tumor to occur in the upper lip, whereas malignant lesions to predominate in the lower lip.^{3,7} Owens and Calcaterra⁸ found 90% of the upper lip tumors to be benign in reports in the literature. Eveson and Cawson³ documented 75% of upper lip tumors as benign. In the study by Neville et al⁹, 92% of the upper lip tumors were monomorphic adenoma (canalicular adenoma and basal cell adenoma) and pleomorphic adenoma, whereas sporadic cases of adenoid cystic carcinoma, acinic carcinoma, and adenocarcinoma constitute the remainder. Malignant tumors tend to predominate in the lower lip. Owens and Calcaterra⁸ found that 7 of the 13 malignant tumors in the lower lip were mucoepidermoid carcinoma. This finding was also consistent with the report from Neville et al⁹, which confirmed mucoepidermoid carcinoma to be compose more than 80% of lower lip tumors.

Minor salivary gland tumor presents as soft or firm masses, with most having a nodular, exophytic component. Ulceration of the nodular mass may occur, but the presence of ulcer provides no clue to the invasiveness of the tumor. Those that are soft on palpation usually have large cystic cavities and an abundance of mucin. The more solid tumors, especially pleomorphic adenoma with bone and cartilage formation, are firm on palpation. Differentiation between benign and malignant tumors is not possible without histopathology. However, suspicion of malignancy necessitates a biopsy before surgical treatment. When a lip mass is freely movable and submucosal, an excision of the mass with surrounding tissue may be adequate. On the other hand, a multilobulated mass fixed to the underlying tissue is more

likely to be malignant. A wide local excision with a 1.5 cm margin and resection of 1 anatomic barrier beyond the tumor are necessary for surgical clearance. This will sacrifice the overlying and adjacent mucosa, the orbicularis oris muscle, and even the involved external skin of the lip. Reconstruction is effected by local tissue advancement or Abbe flaps.¹⁰

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