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Case Report

Pleomorphic Adenoma with Atypical Clinical Profile-A Case Report

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Abstract: Pleomorphic salivary adenoma is the most common salivary tumour which presents in elderly population with commonly involving the superficial lobe of parotid gland. The tumour usually grows very slowly. In this case report we present a young female of 20 years with left parotid pleomorphic adenoma characterised by rapid growth and early involvement of deep lobe of parotid.
Keywords: pleomorphic, salivary, adenoma.

INTRODUCTION

Almost 3% of head neck tumours are salivary gland tumours[1]. Pleomorphic adenoma is the most common salivary gland tumour which constitutes 60-65% of the salivary gland tumour and most commonly it involves from parotid gland[2]. Superficial lobe of parotid is most commonly involved in pleomorphic adenoma[3]. Pleomorphic adenoma most commonly presents at 4^{th} to 6^{th} decades and very rarely in young adults with female to male ratio 2:1 [4]. Though pleomorphic salivary adenoma are benign they have a potential to become malignant[1]. They have a high incidence of recurrence.

We present a case of pleomorphic adenoma in a young age female with rapid growth and deep lobe involvement which are not common presentation for pleomorphic salivary adenoma.

CASE REPORT

A 20 year old female patient attended our ENT out patient department with a swelling in the left parotid region for 2 months. The swelling was insidious in onset and rapid on progression. On inspection the swelling was 6*4 cms with smooth surface and no signs of inflammation. On palpation there was no tenderness over the swelling and on bidigital palpation no involvement of the deep lobe of parotid. The opening of stensons duct was also palpated and no signs of inflammation found. There was no enlargement of cervical lymph nodes. CT scan with 2.5 mm cuts showed a well defined heterogenous SOL at superficial lobe of left parotid gland measuring 40*38*53 mms which also involves the deep lobe. FNAC suggestive of pleomorphic salivary adenoma.Total parotidectomy was done for the patient and excised specimen was sent for histopathological examination. Post operatively there was marginal mandibular nerve palsy. The histopathological report was pleomorphic salivary adenoma of parotid gland. The patient is on regular follow up after operation.

Fig-1: Clinical Photograph Showing Swelling of Left Parotid Gland

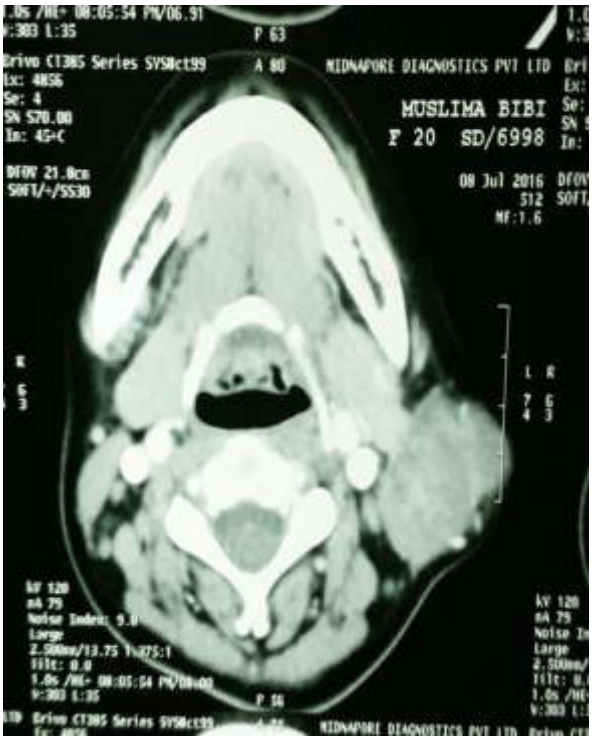

Fig-2:CT Scan(2.5mm slice) Shows A Heterogenous Mass Involving Superficial as Well as Deep Lobe of Left Parotid Gland

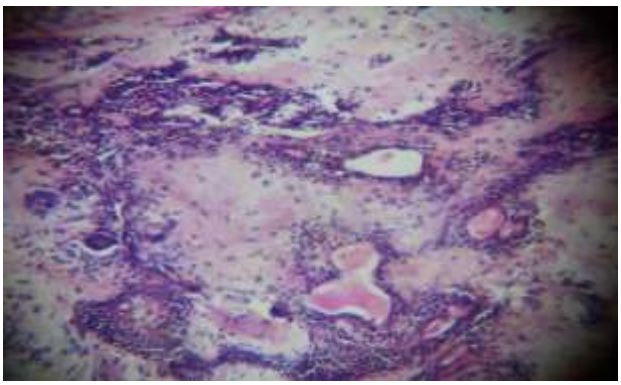

Fig-3:HPE of Pleomorphic Salivary Adenoma

DISCUSSION

As per epidemiological studies pleomorphic adenoma is most common of all salivary gland tumours [5]. Though the exact etiology of pleomorphic salivary adenoma is not known, there is increased incidence of this tumour following exposure to radiation. There are studies suggesting simian virus (SV40) plays a causative role in the development of pleomorphic salivary adenoma [6].

Histologically, the tumour is characterized by morphological diversity with solid, glandular and myxomatous areas. These tumours are classified as classic type, myxoid type and cellular type based on epithelial, myoepithelial and stromal component[7].Usually a capsule is present around the tumour which is focally thin or absent, mostly in cases of myxoid subtype and large tumours[8].Necrosis and increased mitosis suggests a probability of malignant change[9]

Immunohistochemistry is helpful in differentiating pleomorphic salivary adenoma from other tumours and also to identify various cell types. 70% of the pleomorphic adenomas show cytogenetic abrerrations. HMGA2 and PLAG 1 are the 2 specific gene translocations associated with pleomorphic salivary adenoma[10].

Pleomorphic salivary adenoma is radio-resistant so radiotherapy is of no benefit. The treatment of choice for the tumour is superficial parotidectomy or total parotidectomy based on extent of the tumour[11].

In a study conducted by McGregor AD et al during 1974-1983 found that pleomorphic adenoma presenting at early age had significant increase in recurrence. Mucin 1 gene (MUC1) has a significant association with tumour recurrence and malignant transformation[12].This gene analysis could not be done in our case due to financial constraints.

CONCLUSION

Though duration and recurrence are significantly associated with malignant transformation of pleomorphic salivary adenoma the other atypical characteristics like rapid growth rate and early involvement of deep lobe should be studied, reported and followed up to find any significant association with malignant transformation of pleomorphic salivary adenoma.

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