



Submandibular Tumor-Ararecase

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Abstract

Among the benign salivary gland neoplasms, pleomorphic adenoma(PA) is the most common tumor and the gland to be involved is the parotid gland. Its occurrence in the submandibular or the sublingual gland is uncommon, We present a case of histologically proven PA involving the submandibular gland.

Keywords: Salivary gland neoplasm, pleomorphic adenoma, submandibular gland

Introduction

Salivary gland tumors are rare and make up to 3% of head and neck tumors. [Approximately 90% of the benign neoplasm of the major salivary gland is associated with the parotid gland.

Pleomorphic adenoma(PA) comprises 80-90% of these benign neoplasms. PA of the submandibular and sublingual gland is quiet uncommon and comprises rest (8-10%.)' of the group. [2] In a recent Asian study, Subhasnraj in his single institutional review of 422 benign cases of benign salivary gland tumors has reviewed 422 benign cases. [3] out of these ,363 tumors were PA(8G?/o). Of these 363 cases of PA, 203 involved the parotid (56%), 72 involved the submandibular (20%) and 1 involved the sublingual gland (0.2%). The rest had an origin from the minor salivary glands.This case report presents a case of a histologically proven PA involving the submandibuiar salivary gland. The case was treated surgically and followed up for more than 3 years with no recurrence.

Case report:-

A 65-year-old female was referred to the Otorhinolaryngology out-patient department with a history of gradual swelling of right side of neck for

the past 25 years[figure 1].The swelling was insidious in onset and progressive slowly initially but rapidly for the past 3 years and painless in nature. The tumor was extending from right infra-auricular region, involving right submandibular area, coming to the anterior part of the neck, then crossing midline and reaching opposite angle of mandible and hanging till xiphisternum. On palpation, the mass was firm with few cystic areas and multi nodular. The mass was freely movable accept right infra-auricular region and skin partly adherent with the tumor at anterior aspect and the clinically measurable dimension was 20cmX12cmX10cm. There was no neuronal or functional disturbance in the adjacent tissues.The tumor does not move with deglutition. X-ray soft Tissue Neck lateral views shows homogeneous opacity at the anterior neck extending from submandibular region to sternal angle' [Figure 2]. CECT of the neck showed well defined radiolucent mass in the anterior neck extending inferiorly into the submandibular region[figure2,3and 4]. USG neck showed heterogenous solid cystic mass with low vascularity, but peripherally vascular,no neck node is visible accept small thyroid on the left side measuring approximately 5mmX4mm[figure 5]. A provisional diagonosis of submandibular salivary

gland tumor was made and the patient was posted for excision of submandibular gland on the right side under general anaesthesia. With a standard extended submandibular incision the right submandibular gland and the mass was excised in toto and sent for histopathological examination[figure 6].Primary

closure was done on a layer-wise manner with drain attached. The histological examination was confirmatory of PA[Figure 7].The patient is being followed up regularly for almost 3 years now, with no recurrence noted.



Figure 1

Facial profile showing swelling in the right submandibular region extending to anterior neck



Figure 2
X-ray soft tissue neck lateral view

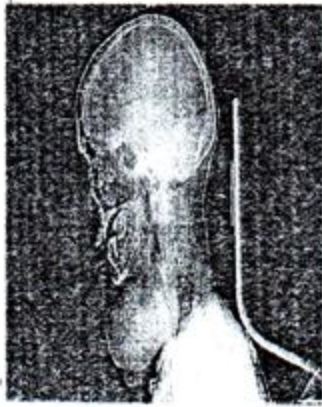


Figure 3
Coronal CT scan



Figure 4
Axial CT Scan



Figure 5

USG Neck



Figure 6

Excised lobular tumor(20cm X 12
cmX 10 cm)

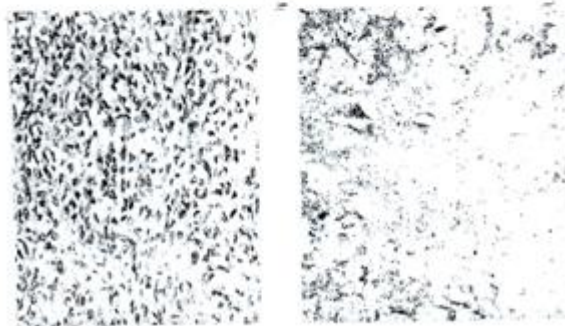


Figure 7

Micro pictograph showing darkly
stained tumor cells lying in a

predominantly mesenchyme like background (H and E,x100)

Discussion:-

PA is an epithelial tumor of complex morphology,possessing epithelial and myoepithelial elements intermingled with

mucoid,myxoid,or chondroid tissue arranged in a variety of patterns and embedded in a mucopolysaccharide stroma.[4] It is the commonest benign tumor of salivary gland[5] and accounts for 90% of all salivary gland tumors. The submandibular gland is the second most common site of PA

after the parotid gland.[6] It is also the most frequent benign tumor arising in submandibular gland.[7] The differential diagnosis should include basal cell adenoma,adenocarcinoma,mucoepi dermoid carcinoma and lymphoma. CT scan or magnetic resonance imaging (MRI) are the gold standard radiological tools for lesion arising from the major or minor salivary glands. Adjunctive procedures like ultrasound guided needle aspiration or fine needle aspiration are non-confirmatory.An incisional biopsy can be taken initially if the lesion is of large size.The recommended surgical approach is with a direct submandibular incision which provides an easy access.The excision of the tumor should also be accompanied by the removal of the submandibular gland in toto. Incomplete removal of the glandular tissue paves the way for a definitive recurrence. PAs are benign tumors with a well-documented transformation to malignancy (carcinoma ex pleomorphic adenoma). It is estimated that up to 25% of untreated PAs undergo malignant transformation. [8] Therefore, early definitive treatment is strongly recommended.

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