



Case Report

JMR 2015; 1(5): 137-138

September- October

ISSN: 2395-7565

© 2015, All rights reserved

www.medicinarticle.com

A case of pleomorphic adenoma of submandibular gland

P K Sahu¹, J R Galagali², Maj Abhipsa Hota*³

¹ Assistant Professor; Department of Otolaryngology & Head & Neck surgery, Command Hospital (Southern Command), Pune-411040, India

² Associate Professor; Department of Otolaryngology & Head & Neck surgery, Command Hospital (Southern Command), Pune-411040, India

³ Resident, Department of Otolaryngology & Head & Neck surgery, Command Hospital (Southern Command), Pune-411040, India

Abstract

Pleomorphic adenoma is the most common salivary gland tumor. It possesses epithelial and myoepithelial elements with mucoid, myxoid, or chondroid tissue in a mucopolysaccharide stroma. Pleomorphic adenoma of submandibular gland is generally seen in middle aged women. It presents as a solitary, well defined, painless slowly growing benign tumor but can turn malignant. USG, FNAC and CT scan help in establishing diagnosis, extent and tumor's relation with surrounding structures. Surgical excision is treatment of choice because of chances of malignant transformation. Our case was a young male who presented with right sided upper neck swelling for four months. It was painless, progressive and without any pressure symptoms. On examination, a 3 x 2 cm, globular swelling was seen in the right submandibular region. It was firm, non tender, mobile and ballotable on bidigital palpation. USG neck revealed a 2.1 x 2.7 x 3.1 cm well defined hypoechoic lesion in right submandibular gland. FNAC reported a pleomorphic adenoma. Gland was excised under general anaesthesia. Skin incision was given 2 cm below right mandible. Subplatysmal flaps were raised. Gland was excised in totality with precise dissection, preserving marginal mandibular nerve. Histopathological examination reported a final diagnosis of Pleomorphic Adenoma of right submandibular gland.

Keywords: Submandibular Gland, Pleomorphic Adenoma, Excision.

INTRODUCTION

Tumors of salivary gland are rare and comprise of around 3% of head and neck tumors^[1]. The parotid gland is affected in more than 70% of cases, submandibular gland in 5-10 %, sublingual gland in 1% and the minor glands in 5%-15%. Pleomorphic adenoma is the most common salivary gland tumor^[2]. Pleomorphic adenoma of submandibular gland is generally seen in middle aged women. It presents as a painless slowly growing mass. These tumors are generally benign tumors but can turn malignant. Hence, treatment is essentially surgical excision^[3]. We present a case of Pleomorphic adenoma of submandibular gland in a young male.

CASE REPORT

A 22 years old male presented with right sided upper neck swelling for the past four months. It was painless, progressive and without any pressure symptoms like change in voice or difficulty in breathing or deglutition. On examination, a 3 x 2 cm, globular swelling was seen in the right submandibular region. The swelling was firm, non tender, not compressible, nonpulsatile, mobile with normal overlying skin. Local temperature was not elevated. Swelling was ballotable on bidigital palpation and transillumination test was negative. USG neck revealed a 2.1 x 2.7 x 3.1 cm well defined hypoechoic lesion in right submandibular gland with a thin rim of normal salivary gland tissue (Figure 1). Vascularity was seen within the lesion but there was no calcification. USG guided FNAC was consistent with pleomorphic adenoma.

A provisional diagnosis of pleomorphic adenoma of right submandibular gland was made and excision of the gland was done under general anaesthesia. Skin incision was given 2 cm below right side mandible. Superior and inferior skin and subplatysmal flaps were raised. Marginal mandibular nerve was identified and preserved. Gland was excised in totality with precise dissection (Figure 2 and 3). Post op period was uneventful. Histopathological examination reported a well encapsulated biphasic tumor composed predominantly of lobules separated by thin fibrous septae with normal salivary glands compressed at one end. The lobules were composed of few acinar structures lined by outer myoepithelial cells and inner columnar cells in a myxoid background. Few areas of chondroid change were seen. No nuclear atypia or increased mitosis was noted. No capsular or vascular invasion was seen. The final diagnosis of Pleomorphic Adenoma of right submandibular gland was made (Figure 4).

*Corresponding author:

Dr. Maj Abhipsa Hota

Resident, Department of Otolaryngology & Head & Neck surgery, Command Hospital (Southern Command), Pune-411040, India

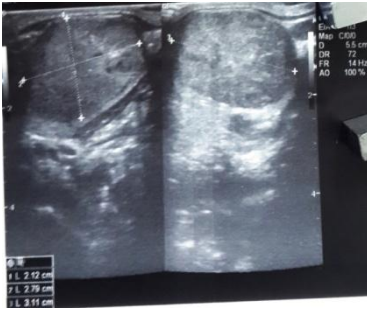


Figure 1: USG neck showing a 2.1 x 2.7 x 3.1 cm well defined hypoechoic lesion in right submandibular gland



Figure 2: Surgical field after excision of Right submandibular gland



Figure 3: Excised specimen

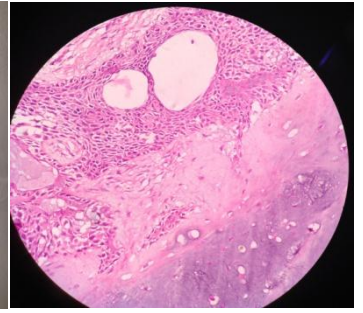


Figure 4: Histopathological picture showing a Pleomorphic Adenoma

DISCUSSION

Pleomorphic adenoma is a tumor possessing epithelial and myoepithelial elements with mucoid, myxoid, or chondroid tissue in a mucopolysaccharide stroma^[4].

They are usually seen in middle aged women. These lesions are usually solitary, ovoid, well defined, slow growing, painless masses^[3,5]. The larger tumors may have pedunculated outgrowths from the main lesion and seem like multiple masses on examination^[6].

The differential diagnosis should include basal cell adenoma, adenocarcinoma, mucoepidermoid carcinoma and lymphoma^[1].

On ultrasound well defined rounded hypoechoic lesions with lobulated or bosselated contour are seen. They may have posterior acoustic enhancement and appear heterogeneous secondary to hemorrhage, calcification, and necrosis. CT scan helps in determining the extent of disease, local spread. Intact fat plane distinguishes benign tumors from malignant. Small tumors are generally smooth, well defined whereas larger tumors tend to be lobulated^[3,6].

Pleomorphic adenomas are benign tumors but can turn malignant (carcinoma ex pleomorphic adenoma) in up to 25% of untreated cases^[7]. Hence early treatment in the form of surgical excision is recommended. The same has been advocated as per various case studies^[2].

CONCLUSION

In our case, a young male presented with a submandibular swelling with FNAC suggestive of a pleomorphic adenoma. We recommend to avoid any undue delay in management of noninflammatory lesions in the submandibular region. Preoperative FNAC proven diagnosis is highly accurate. Surgical excision is advocated as treatment of choice because of chances of malignant transformation in future.

Conflict of interest – All authors have none to declare.

Funding – Nil

REFERENCES

1. Rai S, Sodhi SPS, Sandhu SV. Pleomorphic adenoma of submandibular gland: An uncommon occurrence. *Natl J Maxillofac Surg.* 2011 Jan-Jun; 2(1): 66–68.
2. Alves FA, Perez DC, Almeida OP, Lopes MA, Kowalski LP. Pleomorphic adenoma of the submandibular gland: Clinicopathological and immunohistochemical features of 60 cases in Brazil. *Archives of Otolaryngology–Head & Neck Surgery.* 2002;128(12):1400-3.
3. Verma S. A Case of a Huge Submandibular Pleomorphic Adenoma. *The Internet Journal of Head and Neck Surgery.* 2009;4(2):1-5.
4. Van der Wall I. Salivary gland neoplasm. In: Prabhu SR, Wilson DF, Daftary

- DK, Johnson NW, editors. *Oral Disease in the tropics.* New York: Oxford University Press; 1992. pp. 478–86.
5. Ariane Staub Neish, Amir Zamani. Pleomorphic Adenoma. *Brigham RAD.* July 12, 1995(s).
6. Peter M. Som and Margaret S. Brandwein. *Salivary Glands: Anatomy and Pathology.* Head and Neck Imaging; Peter M. Som. 2003; 39: 2067-76.
7. LiVolsi VA, Perzin KH. Malignant mixed tumors arising in salivary glands. I. Carcinomas arising in benign mixed tumors: A clinicopathological study. *Cancer.* 1977;39:2209–30.