

A RARE CASE OF BASAL CELL ADENOMA OF SUBMANDIBULAR SALIVARY GLAND IN A YOUNG FEMALE - A CASE REPORT

Otorhinolaryngology

**Dr. Manvitha
Sreenivas**

MBBS

ABSTRACT

Basal cell adenoma is a rare benign neoplasm of the salivary glands particularly of the parotid gland. It is hard to pick up on pre operative diagnosis by fine needle aspiration cytology. Though it is common amongst the females, it is extremely rare in the younger age group. Hence this case report reflects some light on the presence of basal cell adenoma of the submandibular gland in a young female and the differential diagnosis of the same.

KEYWORDS

Basal Cell Adenoma, Carotid Body Tumor, Submandibular Salivary Gland

INTRODUCTION

Basal cell adenoma was first described by Kleinsasser and Klein in 1967. Salivary gland tumors consist of 3-4% of all head and neck cancers out of which 80% originate in parotid gland. Basal cell adenoma is a benign epithelial salivary gland tumor which has unique histological characteristics. It is composed of cells with basaloid appearance lacking myxochondroid strongly component of a pleomorphic adenoma. 73% of basal cell adenoma arise from parotid gland itself and majority are seen in age group of 60 years or older. Here, we report a case of a young female with basal cell adenoma of submandibular gland. The clinical presentation, pathological and histological features are discussed.

Case Report

A 27 year old female presented to our hospital with complaints of painless mass on left submandibular region since 7 years which was initially small and firm (1X1 cms) and progressed over 1 year to the present size (3X2 cms). On auscultation, bruit was heard.

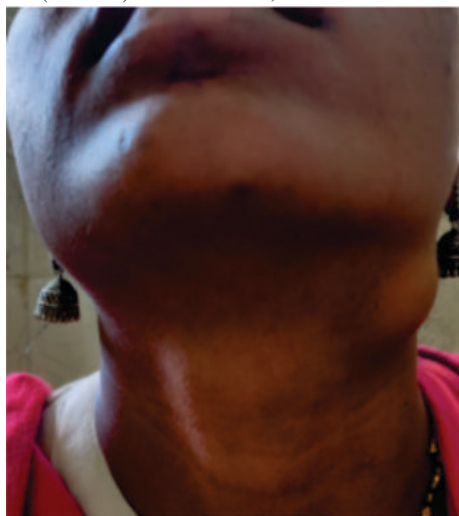


Figure 1: Clinical Photograph Showing Modular Swelling In Left Submandibular Region

Ultrasound of the neck was done which showed the possibility of a carotid body tumor following which MRI of whole spine was done which showed features of subcutaneous necrotic lymph node over left submandibular region.



Figure 2 Ultrasound Of Left Submandibular Region Showing Hypointensity In The Centre Of The Lesion

To confirm the same, Fine needle aspiration cytology was done which showed cytological features of 1) Basal cell adenoma 2) Pleomorphic adenoma.

Surgical excision of the mass was done under general anaesthesia. Hemostasis achieved and done under strict aseptic conditions. Excised mass was sent for histopathological examination and case followed up for 2 weeks showed no signs of recurrence. The report suggested Tubulo- trabecular variant of Basal cell adenoma of submandibular gland. Sections showed sheets of epithelial cells with basaloid morphology with tubulo trabecular type of cells. Cells are uniform with no mitosis.

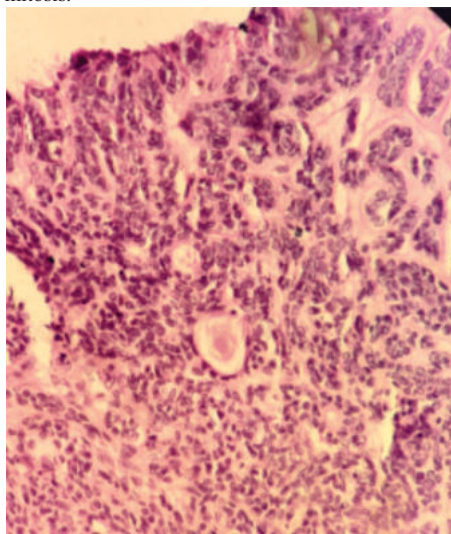


Figure 3 Basal Cell Adenoma - Tubule Trabecular Type On Histopathology Examination, 40 x, H and E

DISCUSSION

Basal cell adenoma defined by WHO states that it is a distinctive benign neoplasm composed of basaloid cells organized with a prominent basal cell layer and distinct basement membrane like structure and no myxochondroid stromal component.

Basal cell adenomas are divided into 6 types - solid, trabecular, tubular, membranous, cribriform, myoepithelial derived stroma rich⁽¹⁾.

The parotid is the prominent site of occurrence for basal cell adenoma (75%) with 5% appearing in submandibular salivary gland which is rare⁽²⁾.

Biopsy is the gold standard procedure as other differential conditions like pleomorphic adenoma and adenoid cystic carcinoma differ in cytological structures⁽³⁾.

Clinically, basal cell adenomas present as slow growing, asymptomatic and freely mobile firm swelling that are compressible. An unusual feature of this case was that the age of the patient was 27

years, in contrast to reported age of occurrence of 57.7 years⁽⁴⁾. The recurrence rates for the solid and trabecular- tubular variants is non existent. Although rare, malignant transformation is common in the membranous type than the other types⁽⁵⁾.

The treatment plan usually for basal cell adenoma, adenoid cystic carcinoma are local excision of mass or submandibular gland, level I neck dissection and supraomohyoid neck dissection plus postoperative radiotherapy⁽⁶⁾.

CONCLUSION

Basal cell adenoma is a specific type of monomorphic tumor of salivary glands.

Histopathological examination is the gold standard method to diagnose the condition and decipher the variant.

It is necessary to perform a complete excision or superficial excision of the involved gland.

REFERENCES

- 1) Seethala RR, Barnes EL. Rare malignant and benign salivary gland tumors. Surg Pathol Clinics. 2011;4:1217–1272. [PubMed] [Google Scholar]
- 2) Nai-Chi C, Hsiu-Mei W, Yi-Hong C, et al. Basal cell adenoma versus pleomorphic adenoma of the parotid gland. Am J Roentgenol. 2007;189(5):W 254–W 261. doi: 10.2214/AJR.07.2292. [PubMed] [CrossRef] [Google Scholar]
- 3) Fine-needle aspiration cytology of basal cell adenoma of the parotid gland: characteristic cytological features and diagnostic pitfalls. Kawahara A, Harada H, Akiba J, Yokoyama T, Kage M. Diagn Cytopathol. 2007;35:85–90. [PubMed] [Google Scholar]
- 4) Bernacki EG, Batsakis JG, Johns ME. Basal cell adenoma: distinctive tumor of salivary glands. Arch Otolaryngol. 1974;99:84–88. doi: 10.1001/archotol.1974.00780030090002. [PubMed] [CrossRef] [Google Scholar]
- 5) Jang M, Park D, Lee SR, Hahm CK, Kim Y, Kim Y, Park CK, Tae K, Park MH, Park YW. Basal cell adenoma in the parotid gland: CT and MR findings. AJNR Am J Neuroradiol. 2004;25:631–635. [PMC free article] [PubMed] [Google Scholar]
- 6) Myers EN, Ferris RL. Salivary gland disorders. 1. New York: Springer; 2007. pp. 353–360. [Google Scholar]