

SALIVARY DUCT CARCINOMA OF PAROTID GLAND- AN INCIDENTAL FINDING

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ABSTRACT

Salivary duct carcinoma, a recently added separate entity of salivary gland tumor is a rare tumour with its aggressive behaviour. Due to morphological similarities with ductal carcinoma of breast the name salivary duct carcinoma is given. It is more common in male than in female. But our case is of 45yr female with mass in the parotid region. The diagnosis on USG and CT was organized collection. But on excision the diagnosis turned to be salivary duct carcinoma of the parotid gland

Keywords: Salivary gland, Salivary duct carcinoma, Incidental finding

INTRODUCTION

Salivary duct carcinoma is a rare tumor comprising about 1 to3% of malignant salivary gland tumours. It was first described by Klinsasser et al in 1968.¹ was not formally recognized in the World health organization classification on until 1991. Tumour is considered separately due to aggressive growth with regional or distant metastases.²⁻⁴

CASE REPORT

A 45 yr female with tender swelling in left parotid region since 1 month. On examination globular swelling of 4x3cm, firm to hard and fixed to underlying structures. No lymph node was palpable.

USG-showed an organized collection in deep parotid. FNAC gave a diagnosis as a benign cystic lesion. CT finding suggestive of a collection of infective origin. Clinical diagnosis kept was parotid abscess. Then the swelling was excised, which was cystic multilobular 4x4 cm in deep lobe with adhesions. Histopathological examination showed ductal lesion containing tumour cells. Also seen tumour cells invading the stromal tissue.

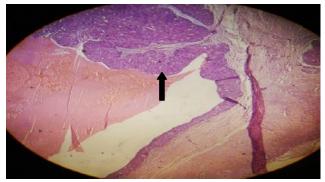


Fig 1: Presence of duct lining with proliferation of epithelial lining with presence of duct lumen and central necrosis.

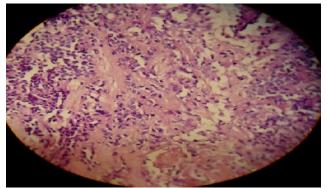


Fig 2: Section shows presence of tumor cells infiltrating in the stroma with desmoplastic reaction

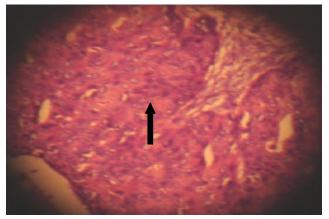


Fig 3: A high power view of tumor cells with less pleomorphism &eosinophilic cytoplasm

The normal parotid gland is also seen at places. Tumour cells are present in cords with desmoplastic reaction [fig 1, 2, 3]

DISCUSSION

It is a rare salivary gland tumour with similarity to comedo type of breast carcinoma hence named as salivary duct carcinoma. Represents 1to3% of all salivary gland tumours and 0.9to 65 of all parotid tumours.¹⁻⁵ It is a rapidly growing tumour. It frequently involves temporal bone via perineural spaces.⁶ Gingival metastases also occurs.⁷ Facial paralysis seen in 40 to 60 % of cases and lymphadinopathy in 35% cases.⁴ It is common in males than in females with a range between 55 to65 yrs.⁴ USG and CT finding are not specific. Positive diagnosis mainly depends upon the histopathological findings. Fine needle aspiration cytology is not always reliable. Gross finding shows tumour of variable size and predominant cystic component and at places invasive part seen. Intraductal compant is papillary, solid, and cribriform with central necrosis. The infiltrative component is made of glands, cords of cells with desmoplastic reaction. Several variants are described such as sarcomatoid, low grade neoplasm and mucin rich neoplasm. Immunohistochemical finding are not useful but a constant over expression of keratin HER-2/new, CEA and c-erd-B2 have been described.⁴

The differential diagnosis includes, mucoepideromoid carcinoma, adenocarcinoma not otherwise specified, Metastatic adenocarcinoma, oncocytic carcinoma, and the most relevant morphological feature is the presence of an intraductual component which is specific for the diagnosis. Therapeutic approach seems to be non-consensual because of the limited data, but many other authors recommend, in parotid gland tumors, a total parotidectomy even in T1 tumors because local disease recurrence is often life threatening. ⁸ If facial paralysis is present, a radical paritoidectomy is mandatory. ⁴ Postoperative radiation therapy is indicated in case of extra parotid extension, pathological resection margins ,cervical lymph node involvement, lymphatic embolus and neurologic invasion. Chemotherapy is generally reserved for distant metastases.⁹

CONCLUSION

Salivary duct carcinoma is an aggressive tumour with worst prognosis because of its metastatic potential. Nearly 50% die within 4to 5 years. The diagnosis may be missed on FNAC, USG, CT due to large areas of necrosis. Histopathological examination is a simple and confirmative.

Conflict of interest: Nil

REFERENCES

- Kliensasser O, Klien HJ, Hubner G. Salivary duct carcinoma. A group of salivary gland tumors analogous to mammary duct carcinoma. Arch Klin Exp Ohren Nasen Kehlkopfhilkd 1968; 192; 100-05
- 2. Seifert G, caselitz J. Epithelial salivary gland tumors. Progressing in surgical pathology. New York: Field and Wood; 1989;9:157-87.
- Gal R, Strauss M, Zohar Y, Kessler E., Salivary duct carcinoma of the parotid gland. Cytologic and histopathologic study. Acta Cytol. 1985;29:454-56
- Jaehne M, Roeser K, Jaekel T, Schepers JD, Albert N, Loning T.Clinical and immune histologic typing of salivary duct carcinoma: A report of 50 cases. Cancer. 2005; 103:2526-30
- Etges A, Pinto DS, Jr Kowalski Lp, Soares FA, Araujo VC. Salivary duct carcinoma: Immunohistochemical profile of an aggressive salivary gland tumour.J.Clin pathol. 2003;56:914-8
- Nguyen BD, Roarke MC. Slivary duct carcinoma with perineural spread to facial canal: F-18 FDG PET/CT detection. Clin Nucl Med. 2008; 236-8

- Brandwein-gensler, Skalova A, Nagao T, Salivary duct carcinoma. In: Barnes L, Eveson JW, Sidransky D, editors. World Health Organization Classification of tumours, Pathology and genetics of head and neck tumours. Lyon: IARCC Press; 2003-pp236-8.
- De Ritu G, Meloni SM, Massarelli O, Tullio A. Management of midcheek masses and tumors of the accessory parotid gland . Oral Surg Oral Med Oral Pathol Oral Radiol Endod .2011;111:e5-11
- 9. Pons y, Alves A, clement P,Conessa C. Salivary duct carcinoma of the parotid. Eur Ann Otorhinolaryngol head Neck Dis.2011;128:194-6