



Research Article

ONCOCYTOMA OF THE ACCESSORY PAROTID GLAND: A VERY RARE CASE REPORT

1,*Dinesh Kumar Yadav and 2Rashmi Yadav

¹MS in Department of general surgery, medical officer, government general hospital, Nasirabad, Ajmer, India
²MS in Department of otorhinolaryngology, head& neck surgery, medical officer, government general hospital, Nasirabad, Ajmer, India

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ABSTRACT

Oncocytomas are a group of rare neoplasms occurring in the parotid gland and account for less than 1% of all salivary gland tumors. Oncocytoma is a benign tumor composed of oncocytes with many hyperplastic mitochondria, usually presenting a solitary nodule. We reported a rare case of a slow-growing parotid oncocytoma in a 53years old woman who presented with a palpable mass in the left cheek region for about 1years.

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INTRODUCTION

Salivary gland neoplasms are a rare group of tumors; the annual incidence rate is 1 in 100,000 individual, comprising about 3% of all head and neck neoplasms (Ellis, 1996). The mean age of patients with salivary gland tumors is 45 years, peaking in the sixth and seventh decades of life. Oncocytomas are a group of rare neoplasms occurring in the parotid gland and account for less than 1% of all salivary gland tumors. Oncocytes are large cells with abundant granular and eosinophilic cytoplasm that contain numerous mitochondria (Stomeo *et al.*, 2006) Oncocytic neoplasms rarely develop in the salivary glands, and oncocytic carcinoma (OC), also called oncocytic adenocarcinoma, malignant oncocytoma, and malignant oxyphilic adenoma, (Seifert, 1992) is rarer. The first case of oncocytic carcinoma was reported by Bauer and Bauer (Bauer) in 1953.

Case Report

A 53years old female presented to government general hospital, Nasirabad with left cheek swelling of 1year duration.

***Corresponding author: Dinesh Kumar Yadav,**
MS in Department of general surgery, medical officer, government general hospital, Nasirabad, Ajmer, India.

On physical examination mass is painless of approximately 3*2 cm in size, soft and freely mobile in left cheek region nearer to parotid duct, facial nerve is intact with no palpable lymph nodes. Patient was sent for FNAC (fine needle aspiration cytology) examination which reveals mucocoele of parotid gland. Patient after through investigations and informed consent planned for surgery. Single globular mass measuring 2.8*2.5*1.5cm was completely excised, with accessory lobe of parotid (soft tissue specimen shown in Figure 1), parotid duct was ligated with sparing of buccal branch of facial under local anesthesia and it was found the mass is well defined, solid with fibrous capsule (Figure 1). Postoperative picture of patient shown in Figure 2. Mass is sent for histopathological examination which reveals oncocytoma of salivary gland. Patient was discharged and kept under observation for any recurrence or future pathology.

DISCUSSION

Salivary gland tumors account for 3% of head and neck lesions and approximately 80% of these occur in the parotid gland (Vlachaki *et al.*, 2009). The majority of parotid gland tumors are located in the superficial lobe and some investigations have reported that 2–4% of parotid tumors originate from the deep lobe.



Figure 1. Biopsy Specimen



Fig. 2. Post Operative picture of patient

Oncocytic neoplasms are rare tumors occurring in the parotid gland, accounting for less than 1 % of all salivary gland neoplasms. Oncocytomas are usually found in the elderly over 50 years old and affect the parotid gland in 80% (Ellis, 1996). Oncocytic neoplasms are composed of large cells with an abundant eosinophilic and granular mitochondria-filled cytoplasm (Seifert, 1992; Capone *et al.*, 2002). According to the World Health Organization (WHO) classification, oncocytic neoplasms are divided into three types: oncocytosis or nodular oncocytic hyperplasia, oncocytoma, and oncocytic carcinoma (Alberty *et al.*, 2001). The term 'oncocyte' was first introduced in 1931 by Hamperl (Yoshihara *et al.*, 1997). Oncocytomas were first described by Jaffé in 1932 (Tan, 2010).

Clinical Presentation

The clinical presentation of oncocytomas is essentially identical to other benign salivary tumors that present as a solitary slow growing painless mass. They are firm, may be multilobulated and mobile on examination (Tan, 2010; Srinivasan *et al.*, 2008). CT and conventional MRI (using T1- and T2-spin-echo sequences) are presently the image modalities of choice used in the evaluation of both palpable and nonpalpable neck lesions (Srinivasan *et al.*, 2008). Computed tomography (CT) images of oncocytomas usually demonstrate well-circumscribed enhancing masses. MR imaging findings of oncocytomas are frequently seen as well-defined margin tumors within the parotid gland. The characteristic MR images demonstrate low signal intensity on T1- and T2-weighted images. FNAC is less sensitive for oncocytic neoplasms, perhaps due to the rarity of these tumors and diagnostic pitfalls previously associated with FNAC (Alberty *et al.*, 2001).

Treatment

It is important to decide whether a mass is superficial or deep and if it affects the facial nerve. A frequently used landmark is the retromandibular vein. The facial nerve lies laterally and obliquely to this vein and can be seen on CT and MRI studies. Surgical resection is the treatment of choice for most cases of oncocytomas. The majority of parotid oncocytomas have a benign nature and slow growth rate. In addition, radiotherapy may play an important role in the management of locally advanced, unresectable, or recurrent salivary gland cancers when surgery is not feasible. The use of systemic chemotherapy in advanced salivary gland cancer has in general been confined to those patients with advanced and incurable disease. The recurrence rate has been reported less than 20%, mainly because of incomplete surgical resection. Malignant transformation and metastasis are very rare (Vlachaki *et al.*, 2009). In our case, the total removal of tumor and preservation of the facial nerve are successful and it depends on the benign course of the oncocytomas in the parotid gland with 1 year of follow up.

Points to Ponder

- Parotid gland oncocytomas are extremely rare & a correct diagnosis is often not made before the surgery
- Complete surgical resection of the tumor is suggested for prevention of the recurrence.
- FNAC is less sensitive and less reliable tool.

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