

Parotidectomy Under General Anaesthesia - A Case Report

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<http://dx.doi.org/10.13005/bpj/486>

(Received: January 10, 2014; Accepted: February 05, 2014)

ABSTRACT

The parotid gland is a serous salivary gland. Parotid tumors are commonly benign, but occasionally they can be malignant, most of the tumours (about 80%) are slow growing and benign. In this article the authors have presented a case report of Warthin's tumor of parotid gland in a 57-year-old male patient with a brief review of clinical features, and diagnostic and operative management of Warthin's tumor.

Key words: Warthin's tumor, parotid gland, salivary gland.

INTRODUCTION

Warthin's tumor also known as papillary cystadenoma, lymphomatosum, monomorphic adenoma or adenolymphoma, is a type of benign tumor of the salivary glands. Warthin's tumor undoubtedly is the most frequent monomorphic adenoma of the major salivary glands. Clinically, it appears as a slow-growing tumor often fluctuant on palpation due to its cystic nature.⁽²⁾ It is the second most frequent benign tumour of the parotid gland after pleomorphic adenoma.⁽³⁾ It accounts for 4-15% of salivary gland neoplasms and is more common in men during their 6-7th decades. Its etiology is unknown, but there is a strong association with cigarette smoking. Warthin's tumor almost exclusively occurs in the parotid gland and bilateral or multifocal tumors. The tumors present as a painless swelling, usually within the lower portion of the salivary gland.

Case report

A 57-year-old male patient was referred to the department of oral and maxillofacial surgery for treatment. Patient gave an eight-year history of

swelling in the left parotid region. Patient did not complain of any pain. Initially, the swelling was small in size and showed a gradual increase to its present dimensions (fig 1). Rate of growth is slow. Clinical examination revealed a firm, non tender swelling on the left parotid region, oval in shape of size approx 5.2 × 4 × 3cm (fig 2). The skin over the swelling was normal and there was no history of paresthesia. Fine needle aspiration cytology was made and a histopathological examination of the tissue sample, these results were suggestive of Warthin's tumor. Smokers are at eight times greater risk of developing Warthin's tumor than the general population¹. In our case the patient was a chronic smoker and gave a history of smoking a pack of per day for past 34-years cigarettes. Pre anaesthetist fitness achieved for patient. Superficial parotidectomy was done on the left side of the parotid region under general anaesthesia, (ie propofol & fentanyl + droperidol). General anesthesia induced through nasal route, propofol is used for induction and maintenance of anesthesia, having largely replaced sodium thiopental for this indication¹⁴. Propofol is also used to sedate individuals who are receiving mechanical ventilation. Its use in these

settings results in a faster recovery compared to midazolam¹⁵. Due to its fast induction and recovery time, propofol is also widely used for sedation of infants and children undergoing MRI¹⁶. Patient was sedated, draped and prepared Local anesthesia lignocaine with adrenaline (1:80,000). Pre auricular incision was placed, flap was raised (fig 3) the tumor site was exposed (fig 4) tumor in mass was excised (fig 5). A surgical drain was placed in order to minimize bleeding, and to prevent haematoma . The surgical drain (fig 7) was placed for few days prior to the removal. Pressure pack was given (fig 8) and excisional biopsy (fig 9) was performed and the result obtained was warthin's tumor (fig 10).

DISCUSSION

Hildebrand first described Warthin's tumour in 1895 as "adenolymphoma", but the entity acquired its current eponym in 1929 after Aldred Scott Warthin wrote a review of parotid tumours and branchial cysts of the cervical region.⁽⁷⁾ Warthin's tumor accounts for about 15% of all epithelial tumors of the parotid gland. Warthin's tumors most commonly present as an asymptomatic, slowly growing round or oval mass usually affecting men in the fifth and sixth decade. Male are commonly affected than the female. In about 12% of cases, there is bilateral tumor development, which is commonly synchronous. In about 6% of cases, multiple Warthin's tumors may be observed in one parotid gland. In our case we experienced a unilateral benign tumor. Warthin's tumor may occur simultaneously with pleomorphic adenomas, different types of carcinoma and malignant lymphomas. Warthin's tumors located outside of the parotid gland account for about 8% of the cases.

Donovan DT et al suggested clinically important to determine preoperatively whether a salivary gland tumor is benign or malignant, because such a determination will strongly influence the choice of surgical procedure. If the tumor is benign, waiting to remove it allows it to grow larger, making the eventual surgery more difficult and prone to complications. In case of pleomorphic adenoma, prolonged delay can lead to malignant change, and therefore prompt local excision or superficial parotidectomy. Parotidectomy with or without facial

nerve removal is performed without delay^{4, 5}. In our case we made the accurate diagnosis of warthin's tumor in a short period of time and performed superficial parotidectomy without delay.

Kensuke Suzuki *et al.*, have presented their experience regarding the clinical complications of FNAC, which predominantly caused acute parotitis as clinical complications in patients with Warthin's Tumor among tumors in the parotid gland. in our case we had as similar experience of parotitis one day after doing FNAC . Patient was on antibiotic coverage and the surgery was done after resolution of infection. S.W. Chae et al has reported, unilateral, multicentric Warthin's tumours of the retromandibular area and lateral aspect of the neck⁸. In our case there were no multiple occurrence of warthin's tumor. malignant transformation of warthin's tumor is extremely rare however Yaranal PJ & Clin Diagn Res has reported a case of squamous cell carcinoma which arose in a Warthin's tumour of the right parotid gland in our case the tumor was benign .

kerawala *et al.*, stated that Damage to the facial nerve is one of the most serious complications of the parotid gland surgery . Patients as many as 30-65 % mostly experience transient. Weakness from facial nerve paralysis, and 3-6% experience permanent dysfunction of the facial nerve following total superficial parotidectomy¹⁰. In our case there was no facial nerve paralysis. High recurrence rates after enucleation, especially for pleomorphic adenoma and Warthin tumors, are related to an incomplete excision. Complications after parotidectomy are more frequently seen than after enucleation, such as hematoma, Frey syndrome, sialocele, fistula, and injury to the greater auricular nerve^{11,12}. Giovanni Dell'Aversana Orabona et al have analysed and performed around 232 cases on surgical management of benign tumors of parotid gland by Extracapsular Dissection (176 cases) and Superficial Parotidectomy (56 cases). On conclusion they have reported that Extracapsular dissection showed similar effectiveness and fewer side effects than superficial parotidectomy hence Extra capsular dissection could also be considered as the treatment of choice for tumors located in the superficial portion of the parotid gland¹³.

CONCLUSION

Superficial parotidectomy helps to prevent the loss of sensation which is the very big drawback.

ACKNOWLEDGEMENTS

We are all thankful to our Principal Prof. Dr. Raghavendra Jayesh for providing all facilities for this study.

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