

## Parotid gland tumors in Tobruk, Libya

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To The Editor: A mass in the parotid region or another salivary gland region often presents a diagnostic challenge with regard to its site of origin, biologic behavior and tissue specific diagnosis [1]. Careful history and clinical examination are required with specific reference to the duration of disease [1]. Ultrasound (US) is useful to detect the extent of the mass, to find any cystic changes, and to detect any lymph node enlargement. CT scan and MRI are helpful in suspicious cases and to rule out soft tissue or bony involvement. FNAC speeds up the diagnostic process and it is a valuable adjunct to preoperative assessment in patients with parotid masses [1,2].

A total 10 patients, 8 males and two females presenting with parotid swelling ( tumor ) were admitted to Al-Batnan Medical Teaching Center from the period 01-01-2004 to 30-04 -2006. The age ranged from 20 – to 60 years old. Medical records were reviewed respectively with special attention to: clinical features; results of preoperative FNA cytology; and results of postoperative histopathology.

All cases presented with painless parotid swelling. In 8 patients, the swelling was on the right side (80%), and in 2 patients the swelling was on the left side (20%). In 9 cases the FNA cytology showed pleomorphic adenoma (90%). In one case, there was benign cellular neoplasm (pleomorphic versus Warthin's tumor). All patients underwent superficial parotidectomy with facial nerve preservation by identifying its trunk and following the branches. In 9 cases (90 %), the postoperative histopathology showed pleomorphic adenoma. In one case, the postoperative histopathology showed Warthin's tumor. This patient came with a recurrent swelling after 5 months, which was discovered during follow up and there was no other swelling during clinical examination, ultrasound showed soft tissue mass in the region of the residual parotid gland and FNA cytology showed recurrent Warthin's tumor. This patient underwent wide local excision with safety margin; the final diagnosis was non-Hodgkin's lymphoma. This misdiagnosis was both at FNA cytology and the previous histopathology. Revision of the previous slides also revealed non-Hodgkin's lymphoma.

### Discussion

Tumors of the parotid gland can occur at any age [3,4,5]. Meanwhile some lesions can be diagnostically challenging. Careful history and clinical examination are required [1]. The US detects the extent of the mass, to find any cystic changes and to detect any lymph node enlargement. CT scan and MRI are helpful in suspicious cases and to rule out soft tissue or bony involvement. FNAC speeds up the diagnostic process and it is a valuable adjunct to preoperative assessment in patients with parotid masses [1,2]. One must be cognizant of pattern memory and the anatomic ambiguity that arise in FNAC of salivary glands in order to achieve a high degree of diagnostic accuracy and clinical utility that FNAC of salivary gland offers [6,7,8].

The optimal surgical management of parotid pleomorphic adenoma is important because of the considerable risk of tumor recurrence and complications. Malignant degeneration of pleomorphic adenomas occurs in 2 – 10 % of adenomas followed for long periods [9]. Standard superficial parotidectomy with safety, demonstrates favorable results with low perioperative and long-term morbidity as well as minimal risk of tumor relapse [10,11,12,13]. On the other hand, with the presence of above parameters long-term follow-up is unnecessary and can be replaced by patient education and self examination [14]. Pleomorphic adenoma is frequently having finger like extension into the normal tissues, recurrence is thought to be due to these small islands of tumor which may be left behind at the time of surgery in particular enucleation which is associated with high incidence of recurrence [14,15]. In our study, the recurrence was in one case due to incomplete excision and postoperative management which depended on wrong FNA Cytology findings. This patient's treatment should have combined chemotherapy and radiation therapy and should not have been exposed to the risks of reoperation.

In conclusion, parotid gland swelling presents a diagnostic challenge. FNAC must be routinely employed for pre-operative diagnosis.

Close cooperation between surgeon and pathologist is valuable and superficial parotidectomy with adequate free margins has acceptable morbidity rates.

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