

# Management of Parotid Tumors: The Experience of Our Department of Maxillofacial Surgery about 158 Cases

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**Abstract:** *Parotid tumors represent 90% of salivary tumors. They are characterized by a very varied clinical presentations and histological forms. We report a descriptive retrospective study of 158 cases hospitalized for parotid tumors in the MAXILLO-FACIAL SURGERY department of the Rabat specialty hospital over a period of 10-year, from January 2010 to January 2020. The variables analyzed during this work are sex, age, location, anatomopathological examination, and therapeutic conduct. We will also discuss the interest of the SMAS flap which is always used in all our patients; the various complications and their management.*

**Keywords:** Parotid tumors, parotidectomy, SMAS flap

## **Introduction:**

Parotid tumors represent 90% of salivary tumors. They are characterized by very varied clinical presentations and histological forms. Pleomorphic adenoma is the most frequent histological type [1,2]. The treatment is most often surgical.

The variables analyzed during this work are sex, age, location, anatomopathological examination, and therapeutic conduct.

We will also discuss the interest of the SMAS flap which is always used in all our patients; the various complications and their management.

## **Materials and methods:**

We report a descriptive retrospective study of 158 cases hospitalized for parotid tumors in the MAXILLO-FACIAL SURGERY department of the Rabat specialty hospital over a 10-year period from January 2010 to January 2020.

In our study, we eliminated tumors of extra parotid origin with invasion of the parotid and non-tumor lesions of the parotid.

## **Results:**

The average age of the patients was 44 years old with a sex ratio (M/F) of 0.82.

The most dominant clinical presentation was swelling of the parotid region, unilateral with a predominance of the left side 65%. This swelling was painless and rarely bilateral.

On the radiological level, 72% of our patients benefited from a cervico-facial CT scan and 28% from an MRI. A fine needle aspiration was performed in 6% of patients and a biopsy in 8% of patients.

These tumors were dominated by the pleomorphic adenoma 70% followed by the whartin tumor 14% (figure 1).

151 of the patients underwent surgical treatment: A total parotidectomy in 66.8% and an exofacial parotidectomy in 30.4% with dissection of the anterograde and/or retrograde facial nerve (figure 2).

Total parotidectomy with laterocervical lymph node dissection with or without nerve sacrifice 0.6%. Parotidectomy extended to the skin 2% with Reconstruction: temporalis muscle, cervical rotation flap.

The flap of the superficial musculo-aponeurotic system (SMAS) was systematically performed for all our patients (figure 2).

7 patients were referred to oncology for treatment, 3 of whom had parotid lymphoma, while the other 4 patients were overwhelmed surgically.

Immediate postoperative complications were transient paresis 15%, permanent paralysis 4%, flap suffering 7%. Late complications: Frey syndrome 3%, depression 4%, recurrence 2%.

**Discussion:**

Parotid tumors are characterized by a large morpho-histological heterogeneity [1] The benign forms are the most frequent dominated by the pleomorphic adenoma which is willingly recurrent and can degenerate in less than 5% of cases [1,2].

Malignant tumors represent 10 to 15% of parotid tumors [2]. MRI is at the forefront of the diagnostic strategy. Fine needle aspiration is not systematic, except if suspicion of a malignant tumor, it allows an orientation of the histological diagnosis [3].

The treatment of parotid tumors is surgical, by an exofacial parotidectomy for pleomorphic adenomas of exofacial seat; by total parotidectomy for large pleomorphic adenomas resulting in capsular exposure or located in the deep lobe as well as for malignant tumors; and by an enlarged parotidectomy with dissection for extensive malignant tumors [4,5].

The main complication is damage to the facial nerve, which is transient in 16 – 63% or permanent in 0 – 16% [5,6]. The involvement of the latter is higher for malignant tumors than for pleomorphic adenoma and increases further in the event of reoperation for recurrence [2,6,7].

Paresis of the facial nerve, Frey's syndrome as well as the modification of the contour of the face [5], all these complications decrease considerably when using the flap of the SMAS. The latter should become an essential step during a parotidectomy.

Radiotherapy is indicated as an adjuvant for malignant tumors for which the locoregional recurrence rate in the case of surgery alone is 30-40%. All the studies confirm the improvement of the prognosis in the event of association with surgery and radiotherapy [5,8,9].

Palliative treatment is indicated for large malignant tumors with extension to the deep lobe or even extra glandular, with facial paralysis and/or tumoral lymphadenopathy [7,8,9].

**Figures:**

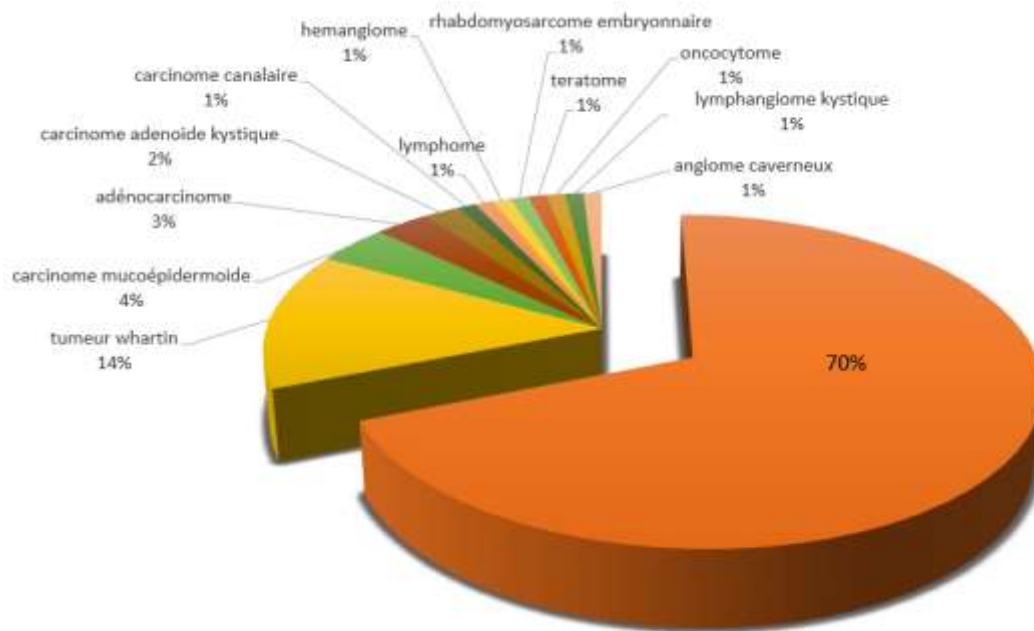


Fig.1 : THE REPARTITION OF PAROTID TUMORS ACCORDING TO HISTOLOGICAL TYPE

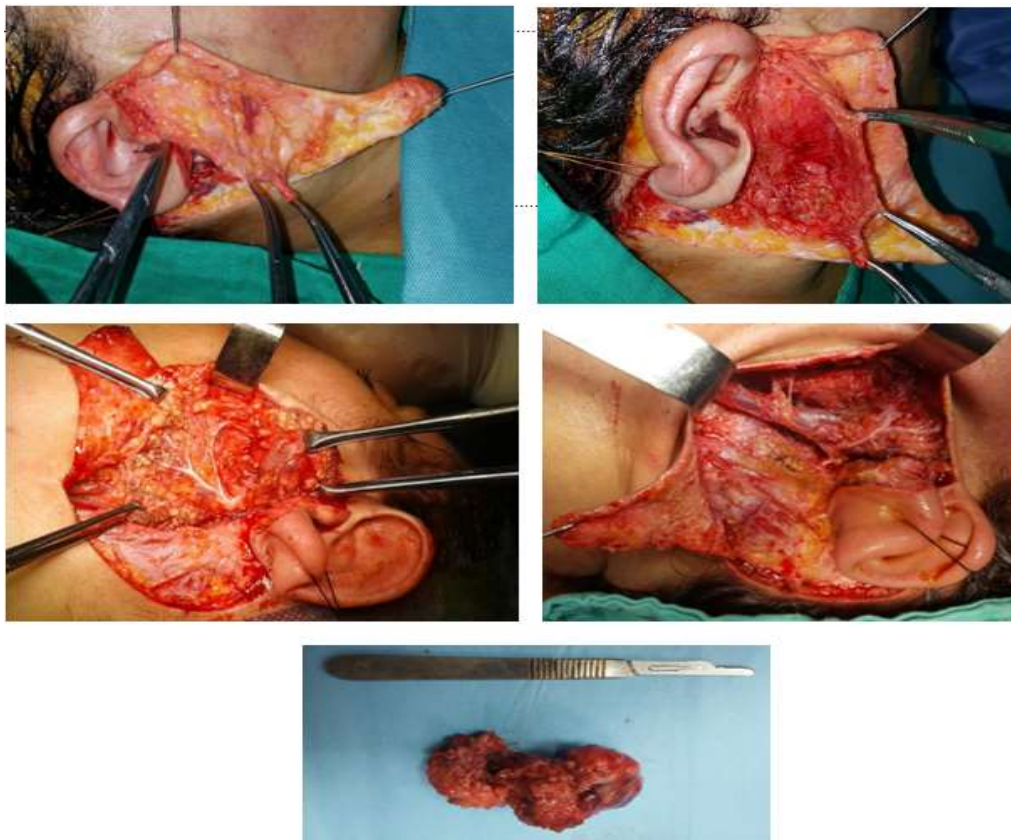


Fig.2 : face lift incision, lifting of the SMAS flap, total parotidectomy and conservation of the facial nerve.

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