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Pleomorphic Adenoma of Lacrymal Gland: Report an Unusual Case

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Abstract **Case Report**

Pleomorphic adenoma is a benign tumor usually affecting salivary glands. This entity can occur in the orbital cavity, particularly in the main lacrymal gland. It frequently affects adults, and uncommonly children. We report the case of a 50-year-old patient, who consults for a right mass next to the tail of the eyebrow arch which histological examination after surgical removal confirmed a pleomorphic adenoma. This report emphasizes clinical, radiological, and histological features of pleomorphic adenomas. Surgery is the treatment of choice with complete resection of an intact capsule. Patients generally have an excellent prognosis for long-term survival after complete surgical excision.

Keywords: Adenoma pleomorphic, lacrymal gland.

INTRODUCTION

Pleomorphic adenoma (PA) of the lacrymal gland is a rare benign tumor whish arises from epithelial and mesenchymal elements[1]. This slow growing tumor, with no gender predilection, usually occurs in the 2nd to 5th decades of life[2]. Clinically, it presents as a painless mass with no negligible aesthetic and functional prejudices.

This report is about a 50 year old female patient presented with a pleomorphic adenoma properly managed in the ENT department of 20 august Hospital of Casablanca. This study was carried out to share our experience and to highlight clinical, radiological findings and surgical approach followed in our case.

The treatment of choice is complete resection of the adenoma with its capsule intact, and the prognosis is excellent when the lesion is completely excised with an intact capsule[3].

CASE REPORT

A 50 year old female patient presented in our department, complaining of a right upper eyelid swelling evolving for about 3 years(Figure 1), gradually increasing of size. No incident of trauma was found in the interrogation, neither a significant medical or family history.

The mass appeared spontaneously. Clinical examination found a non-tender mass, painless, with a firm consistency, measuring approximately 2 cm of major axis (Figure 2). No inflammatory sign regarding the mass was neither found, nor sensitive defect. The skin over the swelling was intact and quite normal.

Ophthalmological examination found a normal visual acuity, conserved ocular movements. Neither limitations nor diplopia were described. General physical examination was normal. No further complaint was found.

Fig-1: Preoperative image of the patient

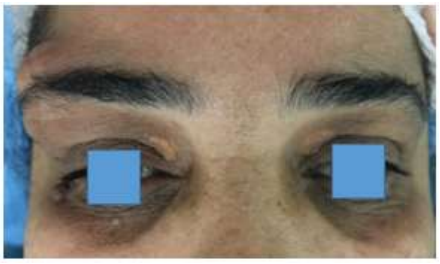

Fig-2: A close image of the patient showing a right mass above the right eye in its outer angle

Facial CT scan (Figure 3), and MRI (Figure 4), showed the presence of a mass in the supero-external angle of the right eye contrast enhancing, measuring 2.5x2x1.8 cm. Optic nerve was intact; the contro-lateral orbit and brain were normal. No bony erosion was present.

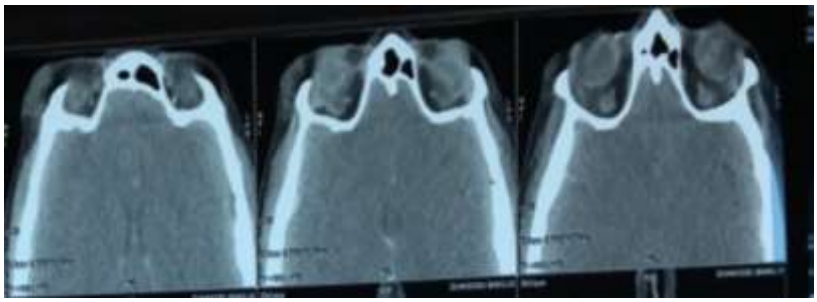

Fig-3: CT scan axial cut showing a mass respecting the bone

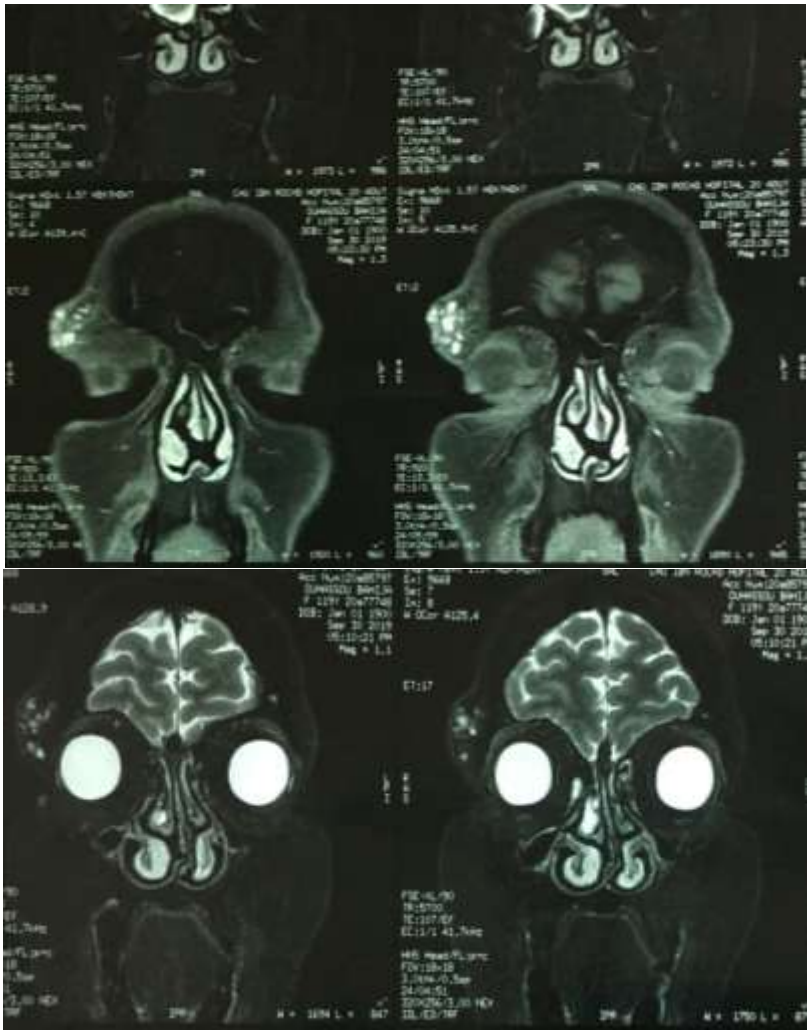

Fig-4: MRI coronal cut showing a heterogeneous mass of the lacrymal gland

To prevent the spread due to biopsy, the latter was not performed. The patient underwent a complete surgical removal under general anesthesia. This surgical treatment consists of a monobloc tumor excision. Its histological analysis concluded to a pleomorphic adenoma. Post-operative follow up showed no recurrence.

DISCUSSION

Pleomorphic adenoma is considered as the most common benign epithelial tumor. Up to 50% of lacrymal gland tumors are epithelial, and a good number of them are pleomorphic adenomas. In fact, they typically but not exclusively occur between the 2nd to 5th decades of life, with no gender predilection[4]. PA is also known as a benign mixed tumor, because of the presence of mesenchymal and epithelial elements. It usually manifests as a painless mass regarding the eyelid lumps, with a long and progressive evolution. Other clinical signs may be present such as exophthalmia, ptosis and diplopia[5].

Radiographically, PA of the lacrymal gland appears as a well-demarcated heterogeneous lesion. CT scan, very essential for diagnosis, is outperforming then the MRI when it comes to bone analysis. This last shows the heterogeneous internal architecture well on T2-weighted images and an enhancing rim on T1-weighted, fat-suppressed, contrast images[6]. Calcifications may be presents[2]. However, the diagnosis of PA is obtained and confirmed by a histological examination.

When clinical and radiological diagnosis is made with a reasonable certainty, biopsy may not be necessary to avoid capsule infraction, and hence the spread of tumor cells[6]. Surgical management consists on a complete and total resection of the tumor and its capsule, in order to prevent a local or regional recurrence[8].

Surgical approach chosen depends upon tumor location, size, as well as surgeon experience[1]. Long term follow up is highly recommended because of the high rate of recurrence, the possibility of malignant transformation, or in case of incomplete excision[9].

The prognosis is excellent with a recurrence rate of less than 3% after 5 years when the lesion is completely excised with an intact capsule[3].

CONCLUSION

Pleomorphic adenomas have to be removed totally in monobloc respecting the tumor capsule, to avoid recurrence or malignant degeneration, which is difficult to control. A regular clinical and radiological follow up is advised and quite systematic.

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