CASE REPORT

Schwannoma in the anterior orbita

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SUMMARY

A schwannoma is a rare benign tumour of peripheral nerve origin. We present a case of a 65-year-old woman with a 1-year history of a slowly enlarging, painless and movable mass, palpable by fingers in her right lower eyelid, adjacent to the inferior orbital rim. No apparent mass was present by macroscopic examination. A subciliary incision and blunt dissection through the septum revealed a pearl-like round and encapsulated cystic mass between the fat pads just below the septum. A total excision of the tumour was performed. Histopathology and immunohistochemistry led to the diagnosis of schwannoma. Although rare, schwannoma should be considered in the differential diagnosis of well-capsulated masses in the periorbital region.

BACKGROUND

Schwannoma is a benign tumour originating from the Schwann cells of the peripheral nerve which can be found in various parts of the body with the most common part being the head, and commonly appear between the second and the fourth decades.¹ Schwannomas account for 1–8% of all head and neck tumours and 1–6% of orbital tumours.^{1–4} They may arise anywhere within or adjacent to the orbit⁴ and is usually associated with a periocular peripheral motor or sensory nerve.

We describe a case of schwannoma presented with a movable and palpable mass, localised under the lower eyelid septum, in the anterior orbit.

CASE PRESENTATION

A 65-year-old woman presented with a 1-year history of a slowly enlarging, painless mass in her right lower lid, which she recognised while she was washing her face. No bulging or apparent mass was seen. The location of the mass is outlined in [figure 1A](#). A round, firm and movable mass was detected by palpation in the right lower eyelid adjacent to the inferior orbital rim.

DIFFERENTIAL DIAGNOSIS

- Dermoid
- Lipoma

TREATMENT

The lesion was totally excised via subciliary incision. Macroscopically, the lesion was encapsulated, approximately 14×12 mm in diameter, located below the septum, between the fat pads ([figure 1B](#)).

OUTCOME AND FOLLOW-UP

Histologically, the tumour was composed of spindle-shaped cells, arranged in Antoni-A and Antoni-B patterns, and immunohistochemical staining revealed a strong S-100 protein expression ([figure 1C](#)). These findings were consistent with schwannoma.

The patient had no stigmata or a family history of neurofibromatosis type 1 or 2 on further evaluation. The tumour did not recur after 1 year of follow-up.

DISCUSSION

Schwannoma is a rare, benign, neurogenic tumour originating from the proliferating Schwann cells of the myelinated peripheral nerve. Orbital schwannomas are usually unilateral and occur mostly in the superior orbit.^{5 6} The symptoms and signs may vary according to the origin or the location of the tumour.⁵ Most schwannomas originating from supraorbital or supra-trochlear nerves cause a downward displacement of the globe, while, less commonly, schwannomas originating from the infraorbital nerve cause an upward displacement of the globe.⁷ Larger tumours may produce diplopia, if they originate from the orbital portion of the third, fourth or sixth nerves and orbital apex schwannomas may mimic retrobulbar neuritis.⁷ However, smaller lesions may stay silent as in our case. The lesion in the current case was in the anterior orbit, below the septum and between the fat pads, so no apparent mass was detected macroscopically. No globe displacement, proptosis or compression of the optic nerve was noted due to the anterior orbital localisation and the smaller diameter of the lesion.

Figure 1 A 65-year-old woman with anterior orbital schwannoma. (A) Preoperative appearance of the right lower eyelid without any evidence of the mass. (B) Gross photograph of the totally excised, well-capsulated tumour. (C) Positive S-100 expression (S-100×50, inset) of the fibrous encapsulated tumour (arrow head; H&E ×50).

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In nearly 50% of patients, the nerve from which the tumour is originated may not be identified during the surgery.^{1 8 9} In these cases, postoperative clinical symptoms, such as hypoesthesia in the area innervated by the suspected nerve, may indicate the nerve from which the tumour is originated.

Surgical resection is the treatment of choice for all kind of schwannomas. Total excision of tumour is usually sufficient to prevent recurrences.^{1 5}

Learning points

- ▶ Although rare, a solitary schwannoma should be considered as a preoperative differential diagnosis of a unilateral, slowly enlarging mass in the periocular region.
- ▶ An early and complete surgical excision should be the preferred treatment of choice.
- ▶ Immunohistopathological evaluation is crucial to diagnose these rare and unsuspected lesions.
- ▶ Examination for evidence of neurofibromatosis should be made.

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