Schwannoma of the Eyelid in a Child

Jerry A. Shields, MD, Hayyam Kiratli, MD, Carol L. Shields, MD, Ralph C. Eagle, Jr, MD, and Solomon Luo, MD

INTRODUCTION

Schwannoma (neurilemoma) is a benign peripheral nerve sheath tumor that is composed of a proliferation of schwann cells. Multiple schwannomas can occur in patients with neurofibromatosis, but solitary schwannoma is not usually associated with that entity. Although schwannoma usually does not affect ocular tissues, it occasionally arises in the orbit,\(^1\) and rarely in the uveal tract\(^2\) and conjunctiva.\(^3\) To our knowledge, only two cases of schwannoma have been previously reported in the eyelid\(^4,5\) and one in the caruncle.\(^6\) All three of these tumors affected elderly women. We report an eyelid schwannoma that developed in a 8-year-old male, an observation that broadens the known clinical spectrum of this condition.

FIGURE 1: Clinical appearance of eyelid tumor. Note the smooth surface, prominent superficial blood vessels, and presence of cilia in the area of the tumor.

FIGURE 2: Low magnification photomicrograph showing encapsulated spindle cell tumor (hematoxylin-eosin, \(\times 10\)).

FIGURE 3: Photomicrograph showing fascicles of bland spindle cells with extracellular collagen characteristic of a benign schwannoma (hematoxylin-eosin, \(\times 200\)).

CASE REPORT

An 8-year-old boy was noted to have a slowly enlarging painless mass in the right upper eyelid in July 1991. The tumor was excised and was diagnosed histopathologically...
as a benign peripheral nerve sheath tumor compatible with a schwannoma. During the next 2 years the tumor gradually recurred and the patient was referred to the Oncology Service at Wills Eye Hospital (J.A.S. and C.L.S.) for further management. The child was otherwise normal with no clinical findings of neurofibromatosis or tuberous sclerosis. A maternal uncle died at age 17 years with uncontrollable seizures and was believed to possibly have tuberous sclerosis.

Examination disclosed a sausage-shaped, painless, subcutaneous mass measuring about 9 × 7 × 6 mm (Fig 1) located just superior to the eyelid margin near the medial aspect of the right upper eyelid. Telangiectatic blood vessels coursed through the thin skin overlying the mass. The tumor was excised intact via a horizontal eyelid crease incision. Histopathologically, the well-circumscribed, somewhat bilobed tumor (Fig 2) was composed of fascicles of nonpigmented spindle cells with elongated, bland nuclei, and abundant extracellular collagen, characteristic of the Antoni A pattern of a schwannoma (Fig 3). No histopathologic features of malignancy were present. The final diagnosis was benign schwannoma of the eyelid.

**DISCUSSION**

The two previously reported cases of eyelid schwannoma\(^4,5\) and the one case of caruncular schwannoma\(^6\) (Table) all occurred in elderly women who apparently had no neurofibromatosis or tuberous sclerosis. In contrast, our patient was a male in the first decade of life. Although schwannoma is occasionally associated with neurofibromatosis, our patient had no family history or clinical findings of that entity. It is intriguing that our patient had a maternal uncle with possible tuberous sclerosis. We are not aware of an association between tuberous sclerosis and schwannoma. Our patient had no clinical manifestations of tuberous sclerosis.

Schwannoma of the eyelid can simulate a chalazion. However, it generally is nonpainful without signs of inflammation. The management is complete excision, since incomplete removal is associated with eventual recurrence and more aggressive behavior.

**REFERENCES**