

Rapidly Enlarging Eyelid Mass

A 5-year-old girl presented to her primary care physician with a large rapidly enlarging right upper eyelid mass after an accidental trauma to the eyebrow area. The child was otherwise well with no history of constitutional symptoms or pain. Medical history was unremarkable. An initial diagnosis of a nonresolving hematoma was made. After a history of rapid growth over 12 weeks after the initial trauma she was referred to our eye institution (**Figure, A**).

Visual acuity was normal, with no afferent pupillary defect. Findings of the physical examination showed mechanical ptosis with no eyelid erythema, edema, or tenderness. There was a solitary oval-shaped subcutaneous mass, which was firm to palpation. It was not freely mobile from the overlying skin which had reddish-to-blue discoloration with visible calcification. There was no globe proptosis or dystopia, and eye movements were normal. Fundoscopy showed no signs of optic neuropathy. Systemic examination was unremarkable except for an enlarged ipsilateral pre-auricular lymph node. Differential diagnosis included pilomatrixoma, pyogenic granuloma, epidermal and dermoid cyst, capillary hemangioma, juvenile xanthogranuloma, and rhabdomyosarcoma.

Computed tomography (**Figure, B**) urgently was performed to exclude rhabdomyosarcoma. Imaging showed a well-defined superficial ovoid complex mass which enhanced avidly with intravenous contrast administration. It had a central non-enhancing component with few flecks of calcification. There was no intra-orbital extension or underlying bone involvement. Excision biopsy was expedited. The tumor was completely excised through a skin crease incision and submitted en bloc for diagnostic histology. This revealed a well-circumscribed oval nodule measuring 2.3×1.5 cm. There were no intraoperative or postoperative complications.

Light microscopy showed sheets of basaloid cells with foci of characteristic shadow cells. Marked inflammatory reaction was noted, dominated by giant multinucleated cells. Histopathologic findings were consistent with a diagnosis of pilomatrixoma, with no evidence of malignancy. Complete surgical excision was curative with no evidence of tumor recurrence during the 6-month follow-up.

Eyelid pilomatrixoma is a rare benign neoplasm tumor originating from the matrix of the hair root. It can occur almost anywhere on the body but has a propensity to occur in the head and neck region, often involving the eyelid or eyebrow. It is most commonly seen in children and adolescents, with a slight female predominance existing.¹ Patients

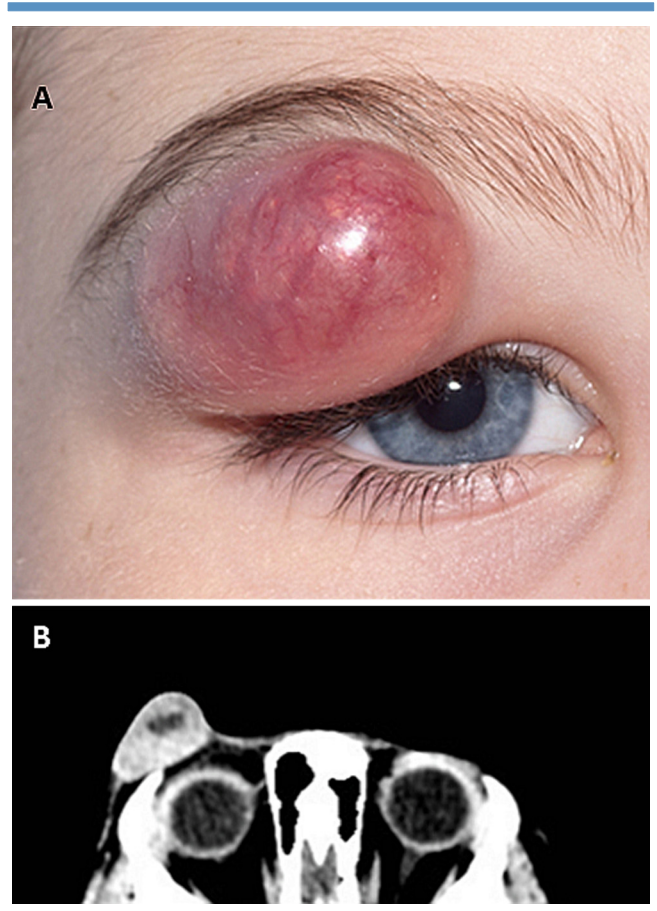


Figure. **A**, Large upper-eyelid pilomatrixoma associated with mechanical ptosis and reddish discoloration of the skin; small chalky nodules can be seen through the skin **B**, Computed tomography.

usually present with a solitary nodule that has been slowly growing over several months or years. A history of trauma can be elicited occasionally. They frequently are misdiagnosed clinically, and definite diagnosis is often only established after excision and histologic examination.¹ Differential diagnosis should include rhabdomyosarcoma. Rhabdomyosarcoma is the commonest orbital malignancy of childhood but can rarely present as an eyelid mass with only erythema of the overlying skin and no other symptoms. However, rhabdomyosarcoma usually extends to the deeper orbital tissues and present with rapidly increasing proptosis and restriction of motility.²

Pilomatrixoma should be suspected in any young patient with a firm, subcutaneous mass in the upper eyelid or eyebrow area.³ Although patients usually present with a slow-growing lesion, some can have a history of rapid growth. Characteristic clinical findings can help clinicians

differentiate it from other tumors. The benign nature of the lesion is reassuring for both family and clinician. ■

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