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Sir,

Tadpole pupil

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We report an unusual case of episodic mydriasis with segmental pupillary distortion.

Case report

A 33-year-old lady presented complaining of an intermittently irregular right pupil. The pupil distortion usually lasted for a few minutes and, despite being painless, was often accompanied by a vague change in periocular sensation. The symptom occurred sporadically, sometimes with several weeks in between episodes, but occasionally happening several times on the same day. There were no other visual symptoms and no significant past ocular history. General health was good and no regular medications were taken.

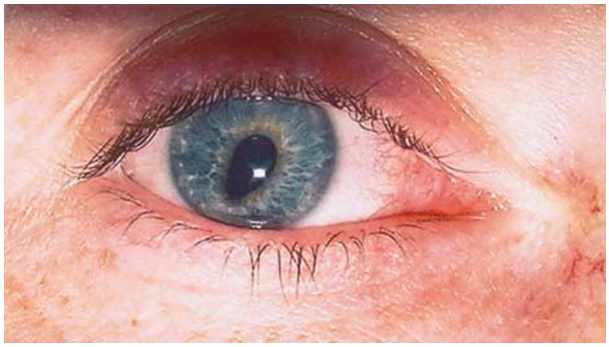

Figure 1 Tadpole-shaped pupil.

On examination, visual acuity was normal bilaterally. There was a 1 mm right ptosis with mild anisocoria, the right pupil being 1 mm smaller in normal room illumination. In dim lighting, the discrepancy in pupillary size increased to 3 mm. Pupil reactions to light and accommodation were considered normal. No other ocular or neurological abnormalities were detected.

Gutt. Phenylephrine 10% in both eyes appeared to improve the ptosis and caused more dilatation to the right pupil (7 mm compared to 4 mm on the left). A provisional diagnosis of a variant of right Horner's syndrome was made. A chest X-ray and magnetic resonance imaging of the brain and orbits were both normal. Some weeks later, the patient captured a picture of the pupillary distortion (Figure 1) confirming the diagnosis of a tadpole-shaped pupil.

Comment

Thompson *et al*[1] gathered and reported on 26 cases of intermittent pupillary abnormality, one segment of iris being temporarily pulled to a peak before returning to normal. The patients were predominantly women, aged 28–48 years. Most cases were accompanied by a degree of visual blurring along with unusual sensations such as an ache, a 'ping' in the eye, or chill on the face.

The brief pupil irregularity was seldom witnessed by a physician. However, on the rare occasions when an episode occurred during an examination, a peaked segment that reacted poorly to light was observed, the rest of the pupil constricted normally. Assessing pupillary behaviour in between episodes, a large number of patients had signs consistent with Horner's syndrome and to a lesser extent Adie's pupil.

The authors named the condition tadpole-shaped pupil and felt that the appearance resulted from a focal spasm of the iris dilator muscle. The aetiology remains unclear, although it is postulated that the cause is of benign neural origin.

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Sir,

Eyelid metastases indicating neuroendocrine carcinoma of unknown origin

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Metastases to the eyelids are rare and mainly related to breast carcinoma. We report here an unusual case of eyelid metastases as the presenting sign of a neuroendocrine carcinoma of unknown origin.

Case report

A healthy 52-year-old man sought medical advice for an erythematous tender nodule, 10 mm in diameter, of the right upper eyelid of recent onset (Figure 1). Physical examination was otherwise unremarkable. The lesion was removed surgically by full thickness resection and reconstruction required cutler beard flap. Histologic examination disclosed solid masses of monomorphous cells poorly differentiated, strongly basophilic, with round nuclei, and low activity in the dermis. Immunohistochemical studies demonstrated that the cells expressed KL1 but not melanA. A diagnosis of primary adnexial adenocarcinoma was made. After 2 months, the patient was admitted to the hospital for

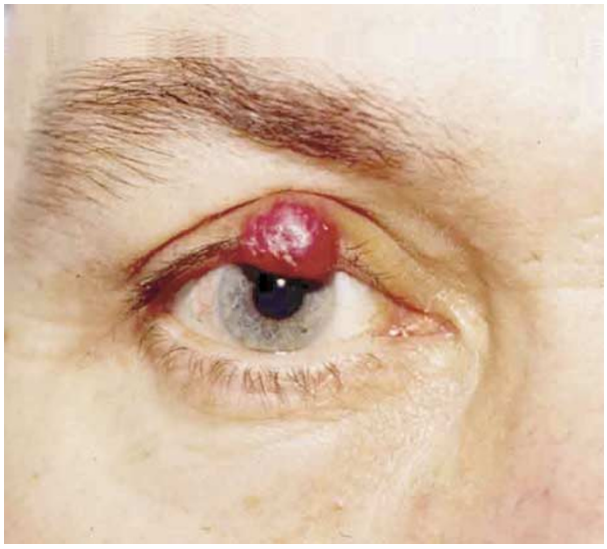

Figure 1 Erythematous nodule of the right upper eyelid.

fatigue; weight loss was 10 kg. Numerous erythematous cutaneous nodules similar to the eyelid lesion were found on the scalp and thorax. A complete blood cell count showed 8.7 g/dl haemoglobin, 9305/mm^3 leucocytes with 61% neutrophils, 31% lymphocytes, 1% plasmocytes, 1% myelocytes and 15% erythroblasts, and a platelet count of 37 000/mm^3. Serum lactate dehydrogenase activity was 551 IU/l (normal 10–280), aminotransaminase activity was within the normal ranges and alkaline phosphatase activity was 238 IU/l (normal <100). A CT scan of the abdomen and thorax showed multiple nodules in the liver and the lungs, typical of metastases. A biopsy specimen from a nodule of the thorax disclosed the same histologic feature as the eyelid lesion. Immunohistochemical studies showed that most of the tumor cells expressed neuron-specific enolase, synaptophysine and chromogranin A, but did not express leucocyte common antigen, vimentine, protein S-100, and cytokeratine 7 and 20. These features were consistent with a metastases of a neuroendocrine carcinoma. Similar results were obtained from the palpebral lesion. At 2 weeks after admission, the patient died of haemorrhagic shock because of bone marrow involvement, before chemotherapy was begun. Post-mortem examination was refused by the family.

Comment

Metastases to the eyelids are rare, representing less than 1% of malignant eyelid lesions.[1,2] In 1987, Mansour and Hidayat[2] reviewed 88 cases from the literature.[2] The primary site was the breast in 41 patients, the gastrointestinal tract in 12, the respiratory tract in six, the skin in six, and the genitourinary tract in four. The lesions