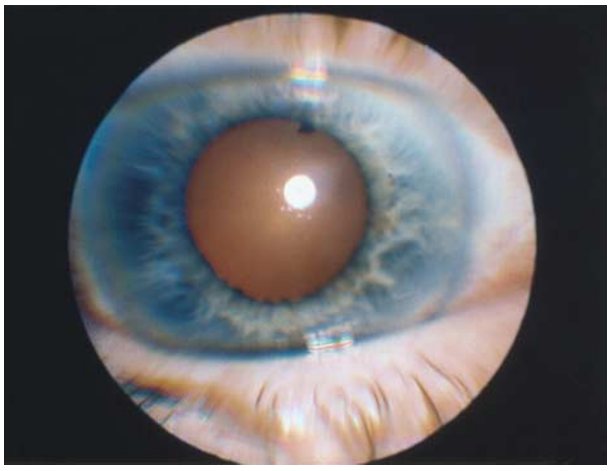

Figure 1 Vascular tuft at 1 o'clock position on pupillary margin.

screen were normal. The intraocular pressure decreased steadily and was 14 mmHg by the following morning.

The hyphaema also resolved, and as the clot retracted a fleshy red vascular tuft became visible on the iris at the pupillary margin. It was about the size of a pinhead (Figure 1) and was situated at 1 o'clock position. The lady was reviewed in outpatients 4 days later. The hyphaema had resolved and vision had improved to 6/9. The vascular iris lesion had remained unchanged. Gonioscopy showed an open angle and no abnormality. The right fundus showed a hyperaemic disc with a splinter haemorrhage, and tortuous veins. The disc appeared normal 6 weeks later. All topical medication was stopped and her condition remains unchanged.

Comment

We feel that this is a case of iris microhaemangioma similar to the one described by Ah-Fat and Canning.[1] However, unlike their case, our patient never had any preceding visual symptoms such as amaurosis fugax. Similar vascular iris lesions have been described in association with systemic conditions such as hereditary haemorrhagic telangiectasis[2] and myotonic dystrophy.[3] The treatment of these vascular lesions is not clear. Apart from a single report of an iris tuft successfully treated with laser,[4] there is not much literature dealing with the treatment of such lesions, and clearly the rarity of these patients limits the development of a management protocol.

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Sir,

Horner's syndrome following chest drain migration in the treatment of pneumothorax

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Horner's syndrome is a well-recognized complication of various thoracic surgical procedures. We present a case of Horner's syndrome that had arisen as the complication of chest drain migration in the management of spontaneous pneumothorax.

Case report

A healthy 25-year-old Chinese male presented to the Accidents and Emergency Department of United Christian Hospital with 3 days' history of right-sided chest pain and shortness of breath. The patient had no

other complaint. There was no history of trauma and no history of cervical or thoracic surgery. Clinical examination revealed a lean, medium-height patient with normal external appearance and pupillary response. Examination of the chest showed signs of right pneumothorax. Chest radiography confirmed the presence of right tension pneumothorax with depressed right hemidiaphragm and left mediastinal shift. Tube thoracostomy was performed in a standard fashion. Immediate postoperative chest radiography showed the tip of chest drain pointing upward and overlapping the posterior part of the right fourth rib (Figure 1a).

The patient was admitted for daily chest radiography to monitor the resolution of pneumothorax. On the third postoperative day, the patient started mobilization exercise during which he complained of right eye ptosis. Chest radiography on the same day showed upward migration of the chest drain with the tip overlapping the neck of the right second rib and the tip of the right transverse process of the second thoracic vertebra (Figure 1c). The chest drain was removed on day 4 with resolution of pneumothorax, but the ptosis persisted.

The patient was referred to the Ophthalmology Department. Examination revealed right face anhydrosis, right eye ptosis of 4 mm and anisocoria. The right pupil was 4 mm and the left was 6 mm in diameter (Figure 2). The intraocular pressure was 12 mmHg in the right eye and 16 mmHg in the left eye. Exophthalmometer reading was 14 mm for the right and 15 mm for the left eye, respectively. Other ocular examinations including extraocular movement were unremarkable. The upper limb and cranial nerves neurology were normal. Instillation of cocaine 4% confirmed right Horner's syndrome, while pharmacological localization with adrenaline 1 : 1000 showed no denervation hypersensitivity. Repeated radiography including lordotic view of the chest, cervical spine, CT and MRI of the brain was normal. At 2 months follow-up, the right Horner's signs persisted.

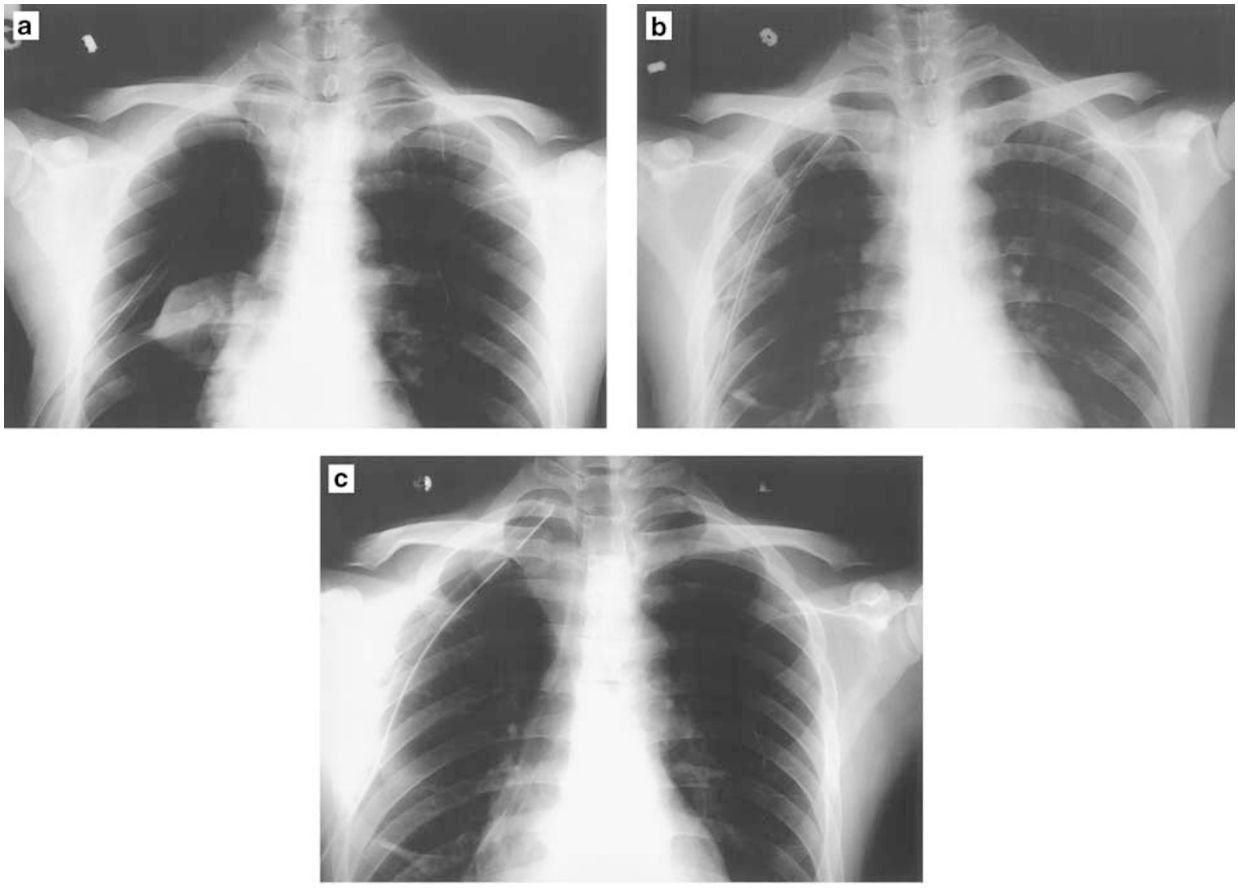

Figure 1 (a) Tip of chest drain overlapped the posterior part of the right fourth rib on day 1. (b) Tip of chest drain overlapped the inferior edge of the posterior part of the right third rib on day 2. (c) Tip of chest drain overlapped the neck of the right second rib and the tip of the right transverse process of the second thoracic vertebra.

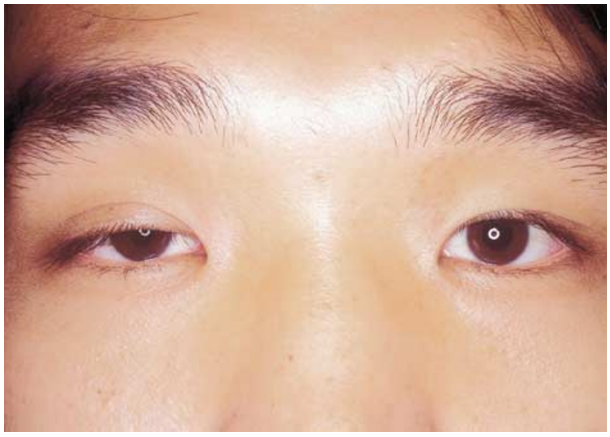

Figure 2 Right Horner's syndrome: ptosis and anisocoria.

Comment

In 1869, Swiss ophthalmologist Johann Friedrich Horner described the clinical findings (interruption of cervical sympathetic pathway, ipsilateral miosis, partial ptosis, enophthalmos and anhydrosis), which later became Horner's syndrome. This oculosympathetic palsy may result from any interruption of the three-neuron pathway in its course from posterior hypothalamus to the eye.

There have been several reports of Horner's syndrome associated with spontaneous pneumothorax.[1–5] They all had in common: (1) early presentation—during or even before the onset of the chest symptoms and (2) reversibility upon relief of pneumothorax. The underlying pathogenesis was presumably because of traction on the sympathetic fibres in superior mediastinal displacement.[2–4,6]

Horner's syndrome has also been reported as complication of tube thoracostomy in the management of various pneumothoraxes (traumatic, spontaneous and iatrogenic) and after thoracic operations.[6–12] One common feature was the radiographic close proximity between the tip of chest drain and the lung apex in the initial insertion. Direct trauma, local haematoma, pressure ischaemia, inflammation and induced adhesion were all suggested to play a role.[6,7,9] The onset of Horner's syndrome after tube thoracostomy varied considerably from 12 hours postinsertion to 42 days after the removal.[7,10] In total, 57% of cases showed no signs of reversibility after a follow-up period from 3 months to 1 year despite removal of the chest drain.[6,7,9,12] While there was no association between the timing of onset and reversibility, for those with repositioning within 1 day, 66% of cases showed recovery of the Horner's signs.

In our patient, we believed that the second-order preganglionic neuron was injured by the migrating chest drain during its course from the ciliospinal centre of Budge to the superior cervical ganglion near the apical pleura. To avoid injury of the apical structure, chest drain insertion of less than 10 cm in the thoracic cavity and inferior to the second rib posteriorly has been suggested.[9,10,12] In addition, we suggest: (1) firm securing of chest drain to skin with large sutures (0 'O' silk) and adhesive tape, (2) daily radiographic monitoring of the chest drain position together with clinical examination of the lid position and pupillary response is necessary when chest drain is *in situ*, and (3) prompt repositioning of any chest drain with significant upward migration to prevent irreversible iatrogenic Horner's syndrome.

Acknowledgements

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Sir,

Allergic eye disease associated with mastocytosis
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Mastocytosis is a rare disease characterized by an abnormal proliferation of normal, active mast cells. The disease can present at any age. Symptoms of mastocytosis occur when pharmacologic or physical stimuli cause mast cell degranulation with release of histamine, prostaglandin D2 (PGD2), leukotrienes, heparin, and proteolytic enzymes. Ocular involvement in mastocytosis has been previously documented.[1–3] We report a patient with severe allergic eye disease associated with the condition. To the best of our knowledge, this has not been reported before.

Case report

A 47-year-old lady presented with 2 weeks' history of increasing lid swelling, redness, watering, and itching of both eyes. Her symptoms initially started and were more severe on the left side. She had been seen at the onset of her symptoms by an ophthalmologist when a diagnosis of herpes zoster ophthalmicus was made, and she was commenced on oral acyclovir. Her symptoms worsened and she presented to our department.

On examination, the patient was found to have diffuse facial erythema and oedema. She had bilateral lid swelling, diffuse conjunctival injection with papillary hypertrophy, and watery discharge (Figure 1a). Anterior and posterior segment examination was otherwise normal. The patient had been previously diagnosed with systemic mastocytosis on the basis of clinical signs and symptoms and a positive bone marrow biopsy (Figure 2), and was being treated with systemic antihistamines and cromolyn sodium.

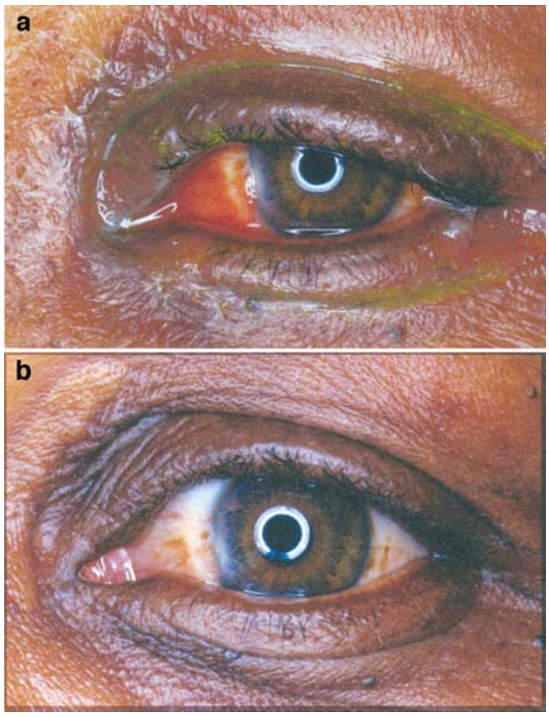

Figure 1 (a) Photograph of the left eye showing lid oedema, conjunctival injection, and watering. (b) Post-treatment photograph of the patient's left eye showing resolution of all signs.

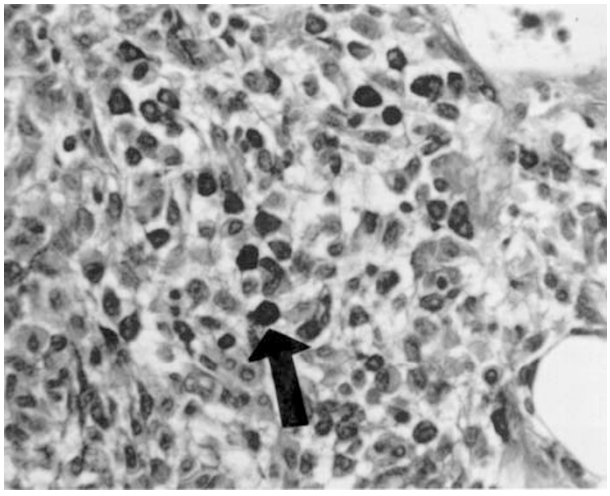

Figure 2 Specimen of a bone marrow biopsy from the patient, stained with Giemsa stain, at $\times 400$ magnification. Note the abundance of mast cells (increased compared to normal) with dark blue staining cytoplasm (arrow).

After consultation with the patient's haematologist, she was treated with a short course of oral steroids, topical antihistamine (emedastine 0.05% eye drops), mast cell stabilizer (sodium cromoglycate 2% eye drops), and