

Sir,  
**Reply to P Cackett *et al* and S Ahmed *et al***

Providing patients with tactile feedback from the PAS, to confirm its operation, is perfectly reasonable. Recognition and acknowledgement of the PAS by the operating surgeon or other theatre staff and communicating with the patient, to demonstrate such and ascertain their concerns, is ultimately the desired outcome in this context.

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Sir,  
**Bee sting-induced ciliochoroidal detachment**

The sting of members of the order Hymenoptera (eg, bees, wasps, and biting ants) has long been known to cause local and systemic reactions in humans.<sup>1</sup> Ocular features reported after such stings include conjunctivitis, corneal infiltrates, cataract formation, acute iritis with keratic precipitates, hyphaema, lens subluxation, and rarely optic nerve involvement and retinal damage.<sup>2-6</sup>

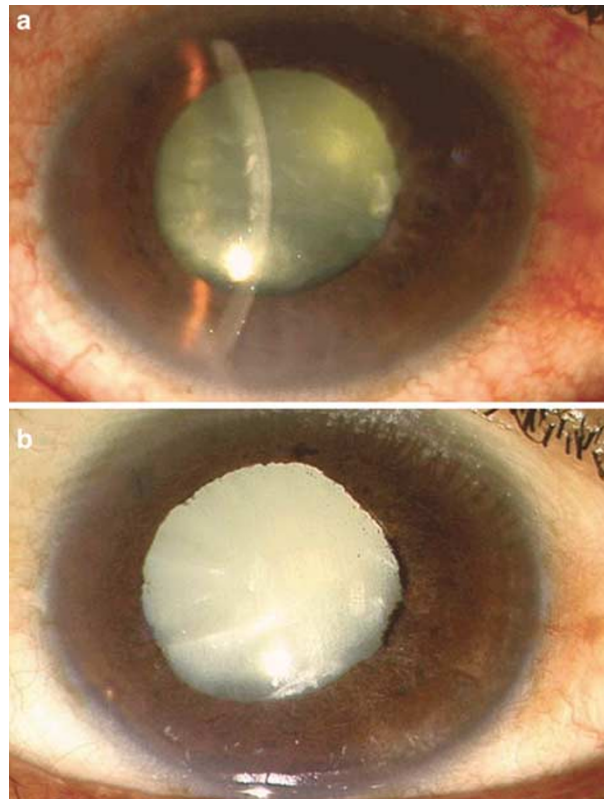
We report a case of honeybee sting-induced ciliochoroidal detachment, which to our knowledge, has not been reported earlier.

#### Case report

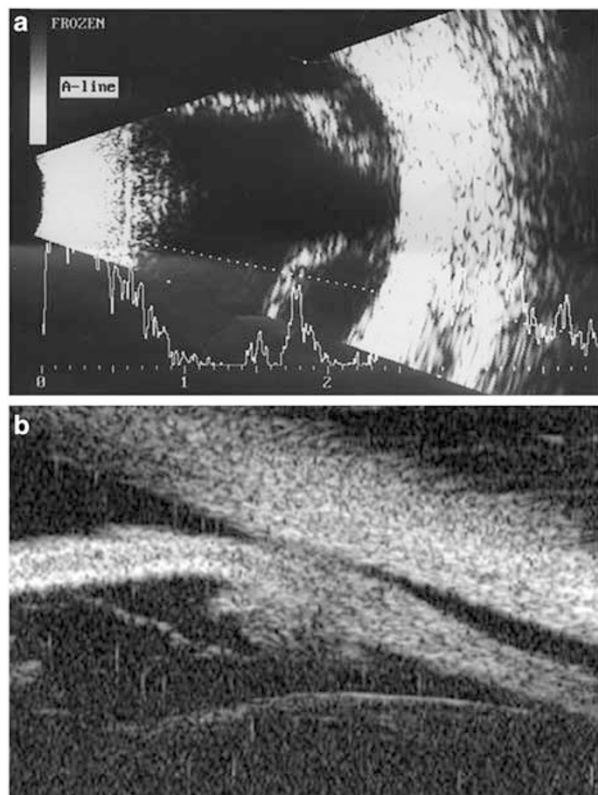
A 25-year-old man presented to the casualty services of our hospital referred by a local ophthalmologist with a history of honeybee sting to the right eye 4 h back while working in a garden. Patient was complaining of severe pain, photophobia, and diminution of vision in the right eye. The patient was initially found to have a bee sting embedded in the cornea by the local ophthalmologist, which was removed and referred with topical

ciprofloxacin 0.3% drops and prednisolone acetate 1% drops four hourly. On examination, visual acuity measured finger counting close to face in right eye and 20/20 left eye. The intraocular pressure was 2 mmHg in the right eye and 16 mmHg in the left eye. There was mild diffuse oedema of both upper and lower lids with conjunctival hyperaemia of the right eye. Central corneal oedema with keratic precipitates was present with no obvious embedded sting (Figure 1). The anterior chamber was shallow with +2 cells and +2 flare. Pupil was sluggishly reactive, segmental iris atrophy was present, and the lens showed cataractous changes. Fundus view was precluded by the cataract. B-scan ultrasonography was performed and revealed a smooth, thick dome-shaped membrane with little after movements suggestive of ciliochoroidal detachment (Figure 2a). Ultrasound biomicroscopy confirmed the ciliochoroidal detachment with no evidence of a cyclodialysis cleft (Figure 2b). The left eye showed a normal examination. Pattern visual evoked potential and flash electroretinography was normal in both eyes.

The patient was treated with oral prednisolone, 60 mg daily tapering dose and continued on ciprofloxacin/



**Figure 1** Slit-lamp photograph of right eye: (a) 4 h after bee sting injury showing corneal oedema, anterior chamber reaction, and cataractous lens and (b) 12 weeks after bee sting injury showing progressed intumescent cataractous lens.



**Figure 2** (a) B-scan ultrasonography right eye showing a smooth, thick dome-shaped membrane with little after movements suggestive of ciliochoroidal detachment. (b) Ultrasound biomicroscopy showing ciliochoroidal detachment right eye.

prednisolone drops. At 12 weeks follow-up, the lid swelling, conjunctival congestion, corneal oedema, anterior chamber reaction, and ciliochoroidal detachment subsided completely, although the lens showed progressed intumescent cataract (Figure 1b). After informed consent, the patient underwent uneventful phacoaspiration and posterior chamber intraocular lens implantation. The postoperative visual acuity was 20/20 with a normal fundus examination of the right eye.

**Comments**

Lesions of the eye after bee or wasp stings may be caused by toxic and allergic reactions.<sup>7</sup> Bee and wasp venom contains a mixture of many biologic amines, enzymes, and toxins. Sudden release of highly concentrated biogenic amines, such as histamine in the venom produce vasodilatation and increase in capillary permeability and the immunologic reaction to high molecular weight enzymes in the venom-induced type 1 hypersensitivity response mediated by immunoglobulin E.<sup>2,4,7</sup>

Ciliochoroidal detachment or effusion refers to an abnormal accumulation of serous fluid in the outer layer of the ciliary body and choroid, resulting from altered

choroidal fluid dynamics.<sup>8</sup> Ocular inflammation increases capillary protein permeability, allowing greater leakage of protein into the extravascular space. This effectively reduces the colloid osmotic absorptive force across capillary walls, favouring extravascular fluid retention. Traumatic ciliochoroidal detachments typically occur in the setting of penetrating ocular injuries, where the inflammation is combined with hypotony.<sup>8</sup> In our case, bee sting-induced type 1 hypersensitivity response and ocular inflammation accounted for the ciliochoroidal detachment. As well, the presence of cyclodialysis cleft must be excluded, which was absent in our case.

Various ocular lesions of the cornea,<sup>2-4</sup> optic nerve,<sup>5</sup> and rarely retina<sup>6</sup> in the form of unrecordable electroretinography responses have been reported, but to our knowledge, bee sting-induced ciliochoroidal detachment has not been reported.

**Acknowledgements**

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