Iris cyst after traumatic implantation of an eyelash into the anterior chamber

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Cilia may be passively introduced into the eye during a penetrating injury and are often well tolerated in the anterior chamber (AC). The decision to surgically remove the cilium is difficult and must be based on the individual clinical situation and the possible consequences of leaving organic material in the AC.

We report a case of late development of an implantation cyst from an intraocular cilium.

Case report
A 16-year-old male presented after striking his right eye on the corner of a cardboard box. His
visual acuity was counting fingers. There was a shelved, full thickness corneal laceration that had self-sealed and was Siedel test negative. A cilia was observed in the AC at some distance from the corneal wound. There was fibrin in the AC and a microscopic hyphaema.

The patient was admitted and treated conservatively with padding and topical antibiotics. The cornea healed spontaneously and the visual acuity returned to 6/6 after some months despite the continued presence of the cilia in the AC.

Four years after the injury an iris cyst was observed at the basal end of the cila where it had become embedded in the iris inferiorly (Fig 1). Observation over a period of months showed the cyst to be slowly enlarging.

YAG laser photoablation was unsuccessful and surgical removal was undertaken. The AC was entered at the inferior limbus and viscoelastic was introduced. The cilia and cyst were excised with a broad iridectomy. Light microscopy demonstrated keratinising epidermis with attached stroma containing pigment cells (Fig 2).

The appearances were consistent with an implantation cyst. The postoperative phase was unremarkable with eventual recovery of an acuity of 6/6.

Comment

The passive introduction of a cilia into the eye during intraocular trauma is a relatively rare complication. In contrast to other organic material, it is relatively inert and is rarely associated with infection. If the end of the cilia is within the corneal wound then a patent route for microbial infection might be maintained and consequently surgical removal will be both more desirable and easier to achieve. An immediate granulomatous reaction has been described. Rarely, a delayed inflammatory response leading to visual loss may occur if the cilia is left in situ. Cyst formation has been mentioned by several authors but to our knowledge there has not been documentation of a specific case with histological confirmation.

Various methods of removal of foreign material from the AC have been described. The difficulty of atraumatic surgical removal in an eye with potentially excellent vision explains the initial decision to leave the cilia in the AC in this case. The late development of an implantation cyst at the base of the cilia necessitated surgical removal. Despite the inferior broad iridectomy, the patient has not subsequently complained of glare and has retained excellent visual acuity.

Although cilia are often well tolerated in the AC, the risk of later development of an implantation cyst should be considered.