Traumatic hyphaema in a haemophiliac

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Abstract
A case is presented of a 9-year-old haemophiliac boy who sustained a traumatic hyphaema with secondary haemorrhage. Conservative management was successful in preventing complications, and normal vision was retained.

Traumatic and spontaneous hyphaemata are uncommon in haemophiliacs. Previous case reports have highlighted the possible complications of corneal blood staining and glaucoma. Correct diagnosis and management is therefore important in the presence of a clotting disorder.

Case report
The patient is one of four brothers all affected with haemophilia A, his factor VIII level being 2%. He sustained a blow to his right eye when a tree branch sprang back at him. The eye was somewhat painful initially, though vision was subjectively normal. He was seen in the haematology department, where a subconjunctival haemorrhage was noted, and 460 units of factor VIII were given. The next day the situation seemed unchanged, and a further 690 units of factor VIII were given.

Three days after the initial injury the boy was woken by pain in his right eye and associated nausea. He also noticed reduction of vision. He was referred to the Ophthalmology Department, where vision was 6/36 owing to a 20% hyphaema. The intraocular pressure was normal.

Management was conservative, with five days bed rest and factor VIII (1150 units initially then 500 units twice daily). The hyphaema was absorbed spontaneously over three days; vision at that time being 6/4. Gonioscopy and funduscopy did not reveal any permanent ocular damage, though a slight iridoplegia was noted. No further problems were noted over the following month.

Discussion
It is probable that the patient had a small bleed, invisible to the naked eye, into the anterior chamber at the time of the original injury. Secondary bleeds usually occur during the following four days and are presumably more likely in the presence of delayed clot stabilisation. The secondary bleed carries a higher risk of complications such as glaucoma, which can lead to optic nerve damage or corneal blood staining, which reduces vision and can take a year or more to clear.

Traumatic hyphaema is usually managed by bed rest, though some centres recommend systemic steroids or antifibrinolytic agents. Clotting disorders require correction, and close observation is necessary to prevent the development of complications by means of ocular hypotensive agents, topical anti-inflammatory drugs, or surgical removal of the clot if necessary, particularly in the event of a secondary hyphaema.

We would recommend that cases of ocular trauma in patients with clotting disorders are discussed with an ophthalmologist even if no gross hyphaema is present. In haemophilia factor VIII should be given as soon as possible after the injury, and in the presence of even minor signs of intraocular haemorrhage, admission to hospital, with regular factor VIII infusions during the high risk period, should be considered.

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