Clinical picture

Secondary hemorrhage in traumatic hyphema

A 40-year-old man presented with 3 h history of acute painful vision loss of his right eye. He reported a blunt trauma of the same eye 7 days prior to admission. At examination his visual acuity was reduced to light perception. Slit lamp examination revealed a multilayered hyphema (collection of blood in the anterior chamber). A layer of fresh blood (empty arrows) was noted over the darker clot (white arrows) in the anterior chamber (Figure 1). The intraocular pressure (IOP) was increased (40 mmgh).

Hyphema is usually caused by blunt or penetrating ocular trauma. Spontaneous hyphema may occur as well (iris neovascularization, intraocular tumors...). Rebleeding after traumatic hyphema occurs classically in the first week after the first hemorrhage. Besides the importance of hyphema, rebleeding is one of the main prognostic factors which are generally associated with a poor functional result.

It must be suspected if the size of the hyphema increases or if a supernatant of red clear blood is noted over the older clot in the anterior chamber.

Untreated it may lead to complications such as increased IOP, corneal bloodstaining (hematocornea) and optic atrophy. So it is reasonable to consider the predisposing factors in the management of this condition like: Clotting and blood disorders (hemophilia, sickle cell anemia), uncontrolled hypertension or induced hypertension (physical effort), marked ocular hypotony, clot dissolution.

Thus our patient was placed at bed rest with head end elevation in order to facilitate inferior settling of the blood. Topical atropine (in order to reduce iris movement) and steroids (inhibiting fibrinolysis) were given with IOP lowering therapy.

A work up was performed including: complete blood cell count, activated partial thromboplastin time, prothrombin time, all of which were unrevealing.

The ocular echography excluded other associated ocular lesions (traumatic cataract, retinal detachment, vitreous hemorrhage).

The uncontrolled IOP (within 48 h) required a surgical evacuation with a favorable postoperative evolution. The patient regained progressively a visual acuity of 10/10 within 2 weeks.

Photographs and text from: Z. Hafidi, Y. Amrani, S. Berradi, H. Handor and R. Daoudi, Faculty of Medicine, Department A of Ophthalmology, Teaching Hospital of Rabat, University of Mohammed V, Rabat, Morocco. email: zouheirhafidi@gmail.com

Conflict of interest: None declared.

References
