CORRESPONDENCE

www.nature.com/eye

Sir, Traumatic aniridia and self-sealed globe rupture following blunt trauma

Total iridodialysis following trauma has been reported before, usually associated with globe rupture or dehiscence of the cataract wound.

We report a case of a 65-year-old male who had traumatic aniridia and a self-sealing globe rupture with expulsion of iris tissue in the subconjunctival space.

Case report

A 65-year-old man was referred to our emergency department after having fallen the previous day. He had a background history of cerebrovascular disease with cognitive impairment, epilepsy, history of frequent falls, and a marked thoracic kyphosis making slit lamp examination very difficult.

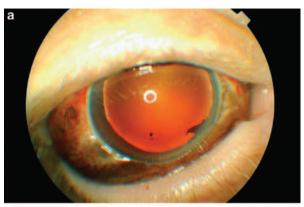
His vision was FC (right eye) and 6/12 (left eye). There was periorbital ecchymosis around the right eye, subconjunctival haemorrhage, and marked brownish pigmentation inferiorly. The anterior chamber was of normal depth with 1 + cells and a dispersed hyphaema. The most striking feature was a complete absence of the iris with visible ciliary processes. The lens was clear and stable, fundus examination was normal. The intraocular pressure was 28 mm Hg in the right eye and 16 mm Hg in the left eye. Anterior segment of the left eye was normal and there was no previous history of trauma.

He had developed a total iridodialysis and probably a self-sealing globe rupture with extrusion of the iris tissue in the subconjunctival space (Figures 1a and b). Owing to masking by the conjunctival pigmentation, the site of scleral rupture could not be identified. Because of general health issues he was managed conservatively with topical prednisolone, chloramphenicol, and timolol. The eye settled over the next few weeks. Three months post-injury vision was 6/18 unaided, intraocular pressure was 14 mm Hg, anterior chamber was quiet. The eye was aniridic and the lens remained clear and stable.

Discussion

Previous reports of traumatic aniridia have been associated with globe rupture or dehiscence^{1–3} of the cataract surgery wound. Some reports describe the phacoemulsification wound to have self-sealed following expulsion of the iris, or in one report extrusion of an IOL⁴ into the subconjunctival space. Following trauma, the aqueous leaks out through the wound, the iris is pulled forward to plug the leak, as the aqueous outflow stops suddenly a pressure gradient is created, which disinserts the iris.⁵ In our case, the whole iris expulsed out into the subconjunctival space, as the globe decompressed, further rupture did not develop and the scleral rupture self-sealed.

This is an extremely unusual presentation and the patient did well on conservative management.



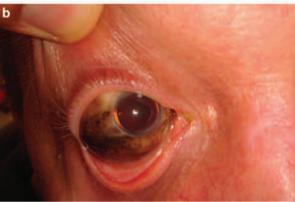


Figure 1 Photographs of the right eye showing iris remnants, a clear lens, and subconjunctival pigmentation. (a) First week post-trauma. (b) Two weeks post-trauma.

Conflict of interest

The authors declare no conflict of interest.

References

- Romem M, Singer L. Traumatic aniridia. Br J Ophthalmol 1973; 57(8): 613–614.
- 2 Prabhu A, Nayak H, Palimar P. Traumatic expulsive aniridia after phacoemulsification. *Indian J Ophthalmol* 2007; 55: 232–233.
- 3 Assia EI, Blotnick CA, Powers TP, Legler UF, Apple DJ. Clinicopathological study of ocular trauma in eyes with intraocular lenses. Am J Ophthalmol 1994; 117: 30–36.
- 4 Lindfield D, Samaras K, Poole T. Self-sealing perforating eye injury. Eye news 2009; 54.
- 5 Sullivan CA, Murray A, McDonnel P. The long-term results of nonexpulsive total iridodialysis: an isolated injury after phacoemulsification. *Eye* 2004; 18: 534–536.

V Sharma and M Mohan

Royal Blackburn Hospital, Blackburn, UK E-mail: vinod1042@yahoo.co.uk

Eye (2010) **24,** 1526; doi:10.1038/eye.2010.76; published online 4 June 2010