

Right eye globe rupture: a case report

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ABSTRACT

Globe rupture is the common term to describe all types of open globe injuries. Open globe injuries are full-thickness wounds of the cornea or sclera that are due to laceration or blunt force trauma. A 65-year old woman presented with a fall while walking on an uneven ground and hit her right eye. She sustained swollen, bleeding, painful right eye (RE) with vision loss. RE showed periorbital hematoma and impaired visual acuity (VA) with only perception of light (PL). Extraocular movements were limited, chemosis was present but no corneal laceration. Anterior chamber was formed with hyphaema. Reverse relative afferent pupillary defect (RAPD) was positive. Left eye was normal. CT orbit showed right periorbital haematoma with globe distortion. Right optic nerve was intact. Intraoperatively showed a clean laceration wound with sharp edge near superior limbus, measuring 18 mm, with iris prolapse. Upon discharge, VA of RE remains poor. In globe rupture, initial VA of only PL or worse is closely associated with poor visual outcome. Wounds involving zone III (>5 mm posterior to limbus) has significantly poorer visual outcomes versus those involving zones I (cornea and limbus) or II (anterior 5 mm of sclera). Primary repair within 24 hours is warranted to prevent poor visual prognosis. The extent of visual loss after a ruptured globe is unpredictable. Early surgical repair improves visual prognosis, however severe injury will often result in vision loss.