

INFERIOR RECTUS AVULSION FOLLOWING BLUNT TRAUMA

Purpose: To describe the clinical features and management of a rare case of inferior rectus avulsion following blunt trauma.

Method: Case report.

Results: A 70 year old man presented to the emergency department following an unwitnessed fall. Examination revealed right periorbital ecchymosis, proptosis and a retrobulbar haemorrhage. Visual acuity and intraocular pressure in the right and left eye was 6/21, 6/9 and 52 mmHg, 21 mmHg respectively. There was a large right hypertropia with

almost complete limitation of motility in all directions. Computed tomography (CT) scan showed displaced fractures of the right lateral, medial and inferior orbital walls as well as displaced fractures of the anterior and lateral maxillary sinus walls.

The patient underwent urgent canthotomy and cantholysis in the ED and subsequent examination under anaesthesia. This revealed an avulsed inferior rectus (IR) 2 mm from the scleral insertion. The proximal muscle belly was unable to be visualised. Postoperatively the hypertropia and motility restriction persisted and magnetic resonance imaging (MRI) of the orbits showed haematoma without muscle entrapment. The patient was returned to the operating theatre and further exploration identified some remnant IR fibres. The tendon sheath could be traced along the inferior oblique muscle tendon. Closure of these fibres resulted in orthotropia and improved motility postoperatively.

Conclusions: Inferior rectus avulsion following blunt trauma is rare. Surgical repairing utilising the contiguous orbital anatomical relations of the muscle can result in an acceptable functional outcome.