PP111 ORBITAL COMPARTMENT SYNDROME: TIME IS VISION

DT Chieng[1], I Then[1], YJ Liow[2], R Rahmat[1]

[1] *Department of Emergency & Trauma, Hospital Sultan Ismail, Johor Bahru, Malaysia*
[2] *Department of Ophthalmology, Hospital Sultan Ismail, Johor Bahru, Malaysia*

INTRODUCTION

The diagnosis of orbital compartment syndrome (OCS) is clinical. Early recognition with emergent orbital decompression, even prior to imaging, is essential in preventing permanent vision loss because "time is vision." The mainstay of management is lateral canthotomy and inferior cantholysis.

CASE REPORT

A 71-year-old man with underlying diabetes mellitus, hypertension and history of cerebral vascular accident, on aspirin therapy, presented 4 hours post blunt trauma to the left eye, suspected from falling head-on onto the edge of a chair. Local examination showed periorbital haematoma, proptosis, lid hematoma, conjunctiva chemosis, subconjunctival haematoma, restricted extraocular muscle movement, positive reverse APD, vitreous haemorrhage and vision loss. A clinical diagnosis of traumatic acute orbital compartment syndrome was made and lateral canthotomy was performed in ED. Subsequent CT- Orbit reported features of posterior left globe rupture. The patient eventually underwent damage control EUA, with the aim of globe contour preservation.

DISCUSSION

Although OCS used to be uncommon, unfortunately, is now on the rise due to increasing use of antiplatelet and anticoagulant medications. Lateral canthotomy is an emergency procedure with aim of decompression for OCS. It is indicated when acute OCS is suspected, even without imaging studies. This patient had presented with signs of optic nerve compression without obvious open wound visible from the front of the eye, rendering high suspicion of OCS. Retrospectively, the optic nerve was probably compromised beyond repair from initial trauma and subsequent progressive increment of orbital pressure over 4 hours prior to intervention. Thus, the lateral canthotomy did not make much of a salvage.

CONCLUSION

Delayed recognition and intervention for OCS often result in irreversible vision loss. The diagnosis is clinical. Emergent orbital decompression with lateral canthotomy may offer hope against permanent vision loss if done in timely manner.