

# Traumatic optic neuropathy: Three case series with different presentations

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## ABSTRACT

**Objective:** Traumatic Optic Neuropathy (TON) can result either from direct or indirect injury to the optic nerve, following trauma to the head region. Diagnosis of TON is usually made based on clinical signs as the optic nerve injury will not be apparent in radiological imaging. **Method:** Case series. **Results:** We report 3 cases of TON presented with various mechanisms of injury. Case 1: A man complained of sudden left eye visual loss after collided with another motorbike in an accident. The vision was only perception to light OS with a positive relative afferent pupillary defect (RAPD) while 6/6 vision OD. CT brain showed multiple orbital walls fracture but no obvious optic nerve impingement. Intravenous Methylprednisolone was given for 3 days but no improvement of vision observed. Case 2: A 4-year-old boy was found crying with bleeding from his left eye. Parents noticed bloody scissors nearby. Urgent CT orbit showed hematoma of superior and medial rectus with irregularities of the middle part of the left optic nerve. Examination under anaesthesia revealed deep laceration wound of left upper eyelid involving orbicularis oculi, superior and medial rectus muscle hematoma with positive RAPD. Three days of intravenous Methylprednisolone followed by 11 days of oral Prednisolone was given but no visual improvement observed. Case 3: A man allegedly fell with unknown mechanism from his motorbike. He sustained left hemi-face de-gloving injury with multiple facial bones open fracture involving lateral orbital wall as demonstrated in CT scan imaging. Primary wound closure and open reduction internal fixation were done. Day 2 postoperatively, he developed RAPD, the vision was 6/60 OS with reduction of optic nerve function hence treated as TON. Three days intravenous Methylprednisolone given followed by 11 days of oral Prednisolone. He gained 6/24 vision after treatment. Repeated CT orbit suggests possible optic nerve avulsion. **Conclusion:** Diagnosis of TON is mostly made based on clinical features even without imaging evidence and early treatment is recommended if the general condition is stable. Proper imaging helps to rule out direct trauma to the optic nerve, which urgent surgery is indicated.

## KEY WORDS:

*Traumatic optic neuropathy, steroid, orbital wall fracture, head trauma*

# Visual loss in a child due to craniopharyngioma: A rare presentation

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## ABSTRACT

**Objective:** To report a rare presentation of craniopharyngioma in a 7-year-old boy. **Method:** a Case report. **Results:** A 7-year-old Malay boy with no known medical illness presented with sudden onset of painless blurring of vision of both eyes for 2 months. There was a loss of weight of about three to four kilograms within a month. On examination, visual acuity of the right eye was 6/36 and left eye was 1/60. There was left eye relative afferent pupillary defect with left eye exotropia. The extraocular muscle movement, intraocular pressure, bilateral anterior and posterior segments were unremarkable. Subsequently, Magnetic Resonance Imaging brain was done and it showed a suprasellar mass that may represent a craniopharyngioma compressing the optic chiasma. **Conclusion:** Loss of vision can be a rare presenting feature of craniopharyngioma. The usual presentations are visual field defects, pituitary insufficiency, and increase intracranial pressure. A high suspicion and early brain imaging may be helpful in diagnosing children with sudden onset of blurring vision.