

I AM BLIND! TRAUMATIC OPTIC NEUROPATHY

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Introduction

Traumatic optic neuropathy (TON) is a serious condition characterized by injury to the optic nerve resulting from trauma, which can lead to partial or complete vision loss. It commonly arises from direct or indirect injury to the optic nerve. Diagnosing TON is often challenging due to the absence of external ocular signs, requiring careful clinical evaluation and imaging studies such as CT or MRI. Early diagnosis and intervention are critical, though optimal management remains controversial.

Discussion

Traumatic optic neuropathy is a rare but potentially devastating consequence of craniofacial trauma. In this case, the patient presented with acute visual loss following blunt head trauma, consistent with indirect TON. The clinical diagnosis was supported by the absence of external ocular injury and the presence of a relative afferent pupillary defect (RAPD), which is a hallmark sign. Imaging studies, particularly CT of the orbit and optic canal, play a crucial role in identifying associated fractures and ruling out compressive lesions.

The pathophysiology of indirect TON is thought due to shearing forces transmitted through the skull to the optic nerve, leading to axonal injury, or swelling within the optic canal. Despite advancements in imaging and monitoring techniques, there remains no universally accepted treatment protocol. Surgical decompression may be considered in cases with clear evidence of optic nerve compression. In this case, the patient's outcome underscores the unpredictable nature of TON and highlights the need for prompt diagnosis and approach to management.

Case Description

We reported a case of a 6-year-old boy who presented with car accident complained of epistaxis and left eye swelling. The primary survey was unremarkable. Secondary survey revealed left eye swelling with no evidence of hyphaema. Plain computed topography scan demonstrated soft tissue swelling over the left orbital with absence of any bony injury. Thus, he was discharged home. Three days post incident he was brought to general practitioner complained of vision loss over the left eye. He was referred to hospital and referred to ophthalmologist, the intraocular pressure was high then done surgical decompression over the left eye.

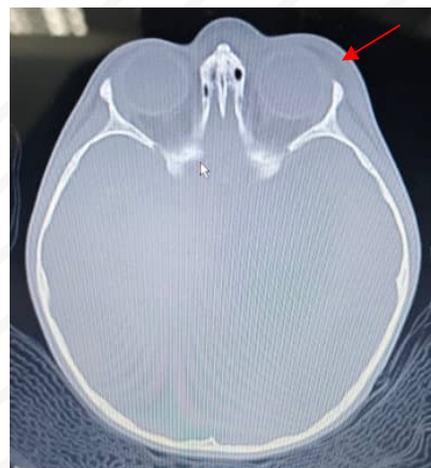


Figure 1: CT Brain showed increase in swelling of soft tissue over the left orbital region (red arrow)

Conclusion

This case highlights the diagnostic challenges and therapeutic dilemmas in managing traumatic optic neuropathy. Prompt recognition and individualized management are essential. Further research is needed to establish standardized treatment protocols.

References

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