



Visual Case Discussion

Simultaneous retrobulbar hematoma and globe rupture

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1. Discussion

Ocular injury is the leading cause of monocular vision loss.¹ Retrobulbar hematoma is a rare ophthalmologic emergency that requires prompt diagnosis and treatment. Trauma is the leading cause of retrobulbar hematoma (74%), while 26% are related to post-operative complications.² Globe rupture complicated by increased intraocular pressure is associated with poor outcomes.¹

2. Visual case discussion

A 53 year old woman had a syncopal event while sitting at her kitchen table and working on an arts and crafts project while holding a pair of scissors upright. When she awoke, she could not perceive any light from her left eye. She presented to the emergency department complaining of left eye pain and bleeding. Evaluation at the bedside demonstrated absence of discernable globe anatomy and periorbital ecchymosis (Fig. 1). Computed tomography imaging demonstrated a retrobulbar hematoma and complete effacement of the left globe (Fig. 2). The clinical impression was syncopal episode and simultaneous left retrobulbar hematoma and globe rupture. She was admitted for further evaluation and enucleation of her left globe.



Fig. 1. Image of left eye of patient with periorbital ecchymosis and lack of discernable globe features.

Questions

- 1 What is the most common cause of retrobulbar hematoma?
- Post-Surgical complication
 - Trauma
 - Arterial-venous malformation
 - Brain tumor

- Aneurysm rupture
- 2 What is the leading cause of monocular vision loss?
- Glaucoma
 - Corneal abrasion
 - Injury
 - Endophthalmitis
 - Uveitis

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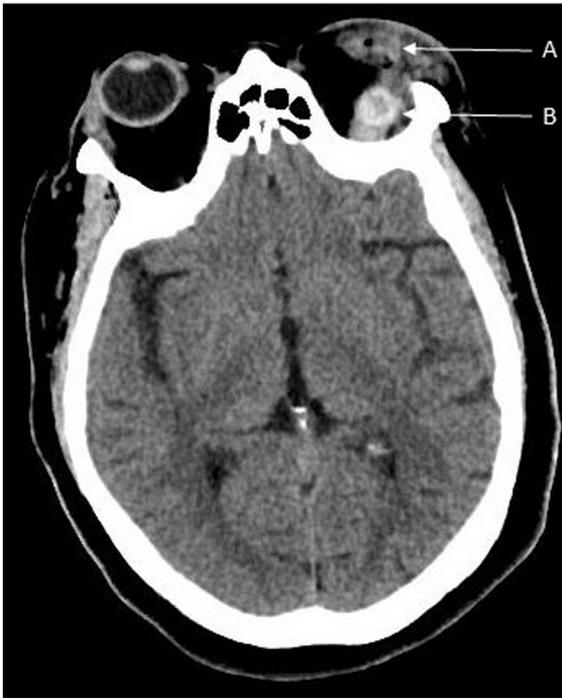


Fig. 2. Computed tomography axial image at the level of the orbits demonstrating full effacement of the left globe (A) and retrobulbar hematoma (B).

Answers

- 1 Correct Answer = b. Retrobulbar hematoma is a rare ophthalmologic emergency that requires prompt diagnosis and treatment.
- 2 Correct Answer = c. Ocular injury is the leading cause of monocular vision loss.¹

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.visj.2019.100669](https://doi.org/10.1016/j.visj.2019.100669).

References

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