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Traumatic Globe Displacement into the Maxillary Sinus

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Case Description

A 27-year-old male presented with downward displacement of the left globe and severe enophthalmous. He had a history of severe blunt trauma to the head during a traffic-road accident the previous weeks. Due to intracranial hemorrhage with increased intracranial pressure signs, craniotomy surgery was performed for him. The left globe was displaced downwardly, with restriction of all extraocular muscles' movements (Figure 1). Examination of the right eye was unremarkable. Orbital computed tomography scans showed large left inferior orbital wall fracture with downward displacement of the left globe to the adjacent maxillary sinus, and the globe was intact (Figure 2). At first, he was treated with oral prednisolone 50 mg/day tapered gradually to decrease intraorbital soft tissues' edema. Then, he was referred to oculoplastic and maxillofacial surgeons for further interventions including orbital floor fracture reconstruction and globe repositioning.

Figure 1: *The left globe was displaced downwardly.*

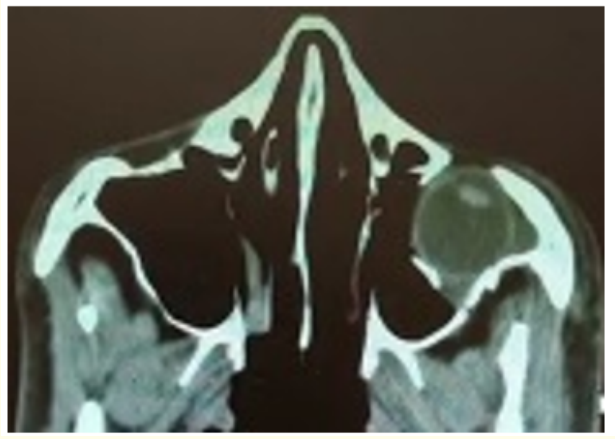

Figure 2: *Orbital computed tomography (CT) scans showed downward displacement of the left globe to the adjacent maxillary sinus.*

Discussion

Traumatic globe dislocation into the paranasal sinuses can be occurred during blowout fracture of the orbital floor [1]. Considering the paranasal sinuses involved in this injury, the maxillary and ethmoid sinuses are the most common, respectively [2]. Although surgical management of severe globe displacement is controversial, but most of the researchers suggest the globe replacement into the orbital cavity should be performed as soon as possible. Any delays in the treatment may increase the risk of visual impairment due to prolonged strain and/or edema around the optic nerve and central retinal artery [1,3].

Patient Consent

Consent to publish this clinical image has been obtained from the patient in writing. This clinical image does not contain any personal identifying information.

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Authorship

All authors attest that they meet the current ICMJE criteria for authorship.

Declaration of Competing Interest

No conflicting relationship exists for any author.

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