Orbital floor fracture with periorbital haematoma

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DESCRIPTION

A 51-year-old woman with a medical history including previous left facial trauma with plates and screws placed who presented to the emergency department with right facial swelling and pain after she tripped down a step. She struck the right side of her face on tile flooring with no loss of consciousness. She denied neck pain, eye pain or foreign body sensation, vision changes, or numbness or tingling of the face. She denied any other injuries. She takes aspirin, but no other blood thinners. The examination was significant for a right periorbital haematoma (figure 1). Pupils were equal and reactive to light. She had symmetric visual acuity and extraocular movements were intact. No other acute injuries were identified on examination. A CT scan of the orbits showed a right orbital floor fracture measuring 1×1.2 cm with a small haematoma of the orbital floor (figure 2). The periorbital haematoma continued to expand and the trauma service admitted her for observation and ophthalmology consultation. The haematoma improved overnight with ice and head elevation. The ophthalmologist confirmed full eye motility, symmetric visual acuity and normal globe pressures bilaterally. She was discharged home with ophthalmology follow-up in 1 week as she continued to have no vision loss or evidence of entrapment. Entrapment of the inferior rectus muscle and/or fat can be a significant consequence of orbital floor fractures. Any decreased sensation of the cheek or upper lip is due to injury to the infraorbital nerve.^{1,2} Severe fractures with these findings will require surgical management.³

Figure 1 Periorbital haematoma.

Figure 2 CT of the orbital floor fracture (arrow).

Angle recession glaucoma is associated with ocular trauma and should also be assessed in the patients during follow-up using a slit lamp and gonioscopy.⁴

Learning points

- ▶ Assessment of blunt facial trauma should include a full assessment for any secondary trauma including cervical injuries.
- ▶ Orbital floor fractures are associated with inferior rectus muscle and/or fat entrapment assessed through extraocular movements.
- ▶ Most orbital fractures need follow-up with an ophthalmologist in 1 week with severe fractures requiring surgery.

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