# Orbital Fractures

## What is an orbital fracture?

The 'orbit' refers to the group of bones that surround the eyeball, making up the eye socket. This is formed by 7 different bones that fuse together to form a solid 'cup' within the skull. An orbital fracture is a break in one of the bones, most commonly, the one beneath the eye, called the orbital floor.

Sometimes the eye muscles can become trapped in the fracture making it difficult to move the eye and causing double vision as a result.

## What are the causes?

Orbital fractures are most commonly caused by trauma to the face, this may be:

- Motor vehicle accidents
- Sports-related injuries i.e. cricket ball to the eye
- Physical assaults i.e. a punch to the face.

## What are the symptoms?

- Pain, swelling and bruising to the eye
- Reduced or double vision
- Numbness over cheek, eyelids, upper lip and teeth
- A sunken or protruding eye
- Difficulty moving the eye
- Swelling to the eye that feels crunchy when touched, caused by trapped air in skin.

## How is it diagnosed?

The medical professional assessing you will decide the need for a CT scan depending on the history given and the clinical signs found on examination.

A CT scan will demonstrate the fracture, but may also reveal other complicating features that will determine your management.

## How is it treated?

The treatment you receive is based on the severity of your injury and the symptoms you are experiencing.

You may be treated:

- Conservatively — this means you do not need to have an operation. You will be treated with pain relief medication and possibly oral antibiotics to prevent infection.
- Surgical correction and fixation You will undergo surgery to have the bone realigned and fixed in position with a synthetic material. The timing of this surgery may be immediate or delayed up to 2 weeks.

## Tips to aid your recovery

- Sleep with your head propped up in bed
- Take regular pain relief as directed by your healthcare provider
- DO NOT Blow your nose
- Avoid straining, coughing, sneezing
- Apply an ice/gel pack to the area every 3-4 hours to reduced swelling during the first 48 hours.

## What are the possible complications?

- Double vision, due to the eye muscles being trapped between broken bone
- Loss of vision, which may be due to bleeding and increased pressure inside the eye, or swelling behind the eye
- Nerve damage resulting in altered sensation to the cheek
- A sunken eye (the eyeball sits deeper in the eye socket)
- A break in the bone between the eye and sinuses can increase the risk of infection
- Drooping of the lower eyelid causing dry eyes.

## Follow up

- You will be asked to follow up with the plastics or maxillofacial team for review.

## See your doctor immediately if:

- You develop new double vision
- If you notice a loss in your vision
- Increasing pain
- Fevers, redness and increased swelling around the eye.