

## Contact Details

If you have any questions concerning your vision, please speak to your Orthoptist or a member of the healthcare team caring for you.

### Orthoptic Department

Tel: 01782 674333

### Emergency Eye Clinic

Tel: 01782 674300

### Oral and Maxillofacial Department

#### County Hospital

Nurse's Office Tel: 01785 230577

Monday to Friday 9.00 am to 4.00 pm

#### Royal Stoke Hospital

Nurse Base Tel: 01782 674801

Medical Secretary Tel: Switchboard 01782 715444

**Use the space below to write in the name and contact details of your Consultant**

Name

Tele:

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## Patient Information Leaflet

# Orbital Fracture (eye socket fracture)



Please speak to a member of staff if you need this leaflet in large print, braille, audio or another language

## Introduction

This leaflet provides you with information on what to expect during your treatment and will help you to understand what is involved. If after reading the leaflet you have any questions, please speak to one of the nursing staff.

## What is an orbital (eye socket) fracture?

The eye socket or orbit is made up of bones surrounding your eye. If the bones around your eye are hit hard enough, they can break. This is called an orbital fracture. Some people with eye socket fracture also have eye injuries that can affect their vision.

## Types of eye socket fractures

**Orbital rim fractures.** These occur when the eye socket is struck violently with a hard object such as a steering wheel in a car accident.

A piece of bone may break off and be pushed in the direction of the blow.

The damage happens in more than one area of the eye socket.

**A tripod fracture or a zygomaticomaxillary complex (ZMC) fracture** is common and involves all 3 major parts of the eye socket.

### **Indirect orbital floor fracture ("blowout fracture")**

This occurs when the bony rim of the eye remains in tact but the paper thin floor of the eye socket cracks or ruptures.

## Double vision surgery correction

The Orthoptist will check, test and measure the position and movement of the eyes to help predict the likely surgical outcome

In severe cases of orbital blow out fractures, permanent damage to the eye movement muscles can occur.

Surgery on eye movement muscles can improve double vision for some people however there may be some residual eye muscle weakness after a period of recovery or the muscles may not recover.

The success of the surgery depends on how many muscles have been affected and to what extent.

## Prisms

Prisms come in different strengths. At first you will be given a temporary prism which will be stuck onto your own glasses or a plain pair of glasses from the hospital.

Some prisms can be incorporated long term into your glasses lens. This would usually be 6 months or more after the injury.

Prisms can sometimes be used to join double vision back to single. The prism bends light to move the displaced images closer together.

- Antibiotics will be prescribed and painkillers for 1 week.
- You will need to use ice packs on the area for a period of 1 week. Avoid blowing your nose.
- Any follow up appointments will be arranged for you with your surgeon.

## Possible complications

- Any cuts made on the face will produce a scar. These will fade with time and after a few months are usually difficult to see.
- Eye sight problems due to bleeding in and around the eye socket, but this is rare.
- As a result of a cut made in the lower eyelid skin the outside corner of the lid may occasionally be pulled down slightly (an ectropion). This tends to settle on its own but may need further surgery.
- If your vision or pain in and around your eye becomes worse when you get home, return to hospital immediately.
- It is rare to have any infection problems due to the plates or screws in your cheekbone however if this occurs they will be removed.
- Nerve damage can occur during surgery causing numbness and tingling. This will get better on its own for most people but takes a few months. It rarely results in any permanent reduction in sensation.

This can cause a small hole in the floor of the eye socket that can trap parts of the eye muscles and surrounding structures.

The injured eye may not move normally in its socket, which can cause double vision.

**Trapdoor Fracture.** The bone under your eye can swing down when broken and then swing shut, trapping the muscle that moves your eye down.

Even if the bones do not look broken, a trapdoor fracture causes pain, severe double vision, nausea, and vomiting.

This type of fracture is more common in children because their bones are more flexible than adult bones

## Symptoms of eye socket fractures

Symptoms may include:

- Decreased vision or double vision.
- Pain, bruising, drainage, tearing, bleeding, or swelling in and around your eye, nose, or cheeks.
- Numbness in your eyelids, cheek, side of the nose, upper lip, teeth and gums.
- Nausea and vomiting, which are more common in trapdoor fractures.
- Trouble moving your eye in one or more direction.
- Sunken eye, droopy eyelid or an eye that bulges out.
- Swelling caused by air under the skin and that feels crunchy when touched.

## Diagnosing the Fracture.

- A doctor will examine your eye movements (upwards, downwards and sideways).
- Any change in vision, especially double vision or a change in eye position i.e. sunken.
- Double vision may occur due to soft tissue swelling which recovers on its own however can take several weeks.
- In the short term an eye patch or prism can improve the double vision.
- More severe blow-out fractures require treatment to get better.
- Recovery can be complete or partial. In a partial recovery some muscle weakness is still noticeable long term.
- A CT or MRI scan may be needed of the facial bones to confirm the fracture.

## Treating the fracture

Eye sockets do not always need surgery and your doctor will tell you if your fracture can heal on its own.

In the short term an eye patch or prism can improve any double vision.

If you avoid blowing your nose for several weeks after the injury, this can prevent any infection spreading from the sinuses to the eye socket tissue.

Antibiotics may be prescribed to help prevent any infection occurring.

## Surgery

There may be a reason why surgery is necessary which may include:

- Experiencing double vision for days after the injury. Double vision can be a sign of damage to one of the eye muscles that help move your eye.
- The eyeball falls back or sinks in the socket (enophthalmos).

The surgeon may decide to wait for a few weeks after the injury so the swelling can go down. This will help with a more accurate examination of the eye socket.

If surgery is needed a general anaesthetic is used so you are asleep and will not feel any pain.

A small incision (cut) is made at the outside corner of the eye in the skin crease just below the lower eyelashes or on the inside of your eyelid.

The break in the bones may be repaired with metal plates which usually stay in and are not removed.

## After surgery

- You will be required to stay overnight in the hospital and will be closely monitored.
- You may need to take 2 weeks off work depending on the type of work you do.
- Please rest and avoid any strenuous exercise.
- Do not operate machinery or drive for at least 48 hours after surgery.