

# INFORMATION LEAFLET

# SKULL FRACTURE



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### WHAT IS A SKULL FRACTURE?

This is when one of the skull bones breaks. To get a fracture you usually require a heavy blow to the head and the commonest reason is a car accident or a fall. Hitting the head with or onto a blunt object can cause a local fracture and this does not need to be a heavy blow.

### TYPES OF SKULL FRACTURE

LINEAR FRACTURE Like a crack in a piece of china.

DEPRESSED FRACTURE
When the bone fragments are pushed into the head.

#### COMPOUND FRACTURE

When the skin over the fracture is cut (lacerated) down to the bone.

DEPRESSED AND COMPOUND FRACTURE. Combination of above fractures

#### BASE OF SKULL FRACTURE

Fracture of the bones at the bottom of the skull. These may involve the ear bones or the bones around the air sacs (sinuses) of the nose. These fractures can cause a leak of the fluid from the brain. There is a risk of meningitis with these types of fractures.

# WHAT PROBLEMS CAN BE CAUSED BY THE FRACTURE?

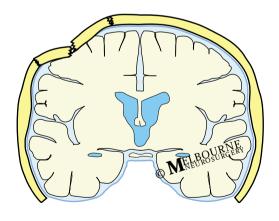
This depends on the type of fracture.

The linear fractures cause few problems unless they extend into a sinus or to the base of skull. Sometimes they can damage a blood vessel and produce a blood clot over the surface of the brain. These can be life threatening.

The depressed fractures cause problems because they can damage the underlying brain. If this has happened even with repair of the fracture with an operation the brain may not recover. This is because the bone has usually penetrated deep inside the brain at the time of the injury. These fractures also have the tendency to cause seizures because of the damaged brain.

In compound fractures the skin is open and bacteria can get into the brain and around the broken bits of bone. This can cause infection in the brain or its fluid. The bone can also get infected and need to be removed. This is then replaced with plastic or another substance.

The base of skull fractures can produce no problems or severe problems depending on location. If they involve the sinuses then they can allow the fluid that bathes the brain to leak out and the bacteria to get in and produce meningitis. If the bone involved is near the ear, not only can the above occur but, there can also be problems with hearing or facial movements. Sometimes the side of the face may stop working completely. This may recover over time.



Depressed Fracture

If the skin is cut above this it is called a

Compound Depressed fracture.

## What happens if I have a seizure?

This will be treated with Anti convulsants drugs (e.g. Dilantin). They usually settlte with medication. Some people have seizures for a long time after a skull fracture (+/- head injury) and require long term medication. Others only have one seizure and can have there tablets ceased after about six months. Factors like driving and work infuence the treatment of seizures.

### What happens if I get meningitis?

This usually means that you have a leak of fluid from the brain or that the bacteria from one of the sinuses around the nose or ear has got into the brain. The fractures around the nose and ear may be difficult to find and special scans may be done to find he fractures. We sometimes inject a radio-active substance into the fulid around the brain and look to see where it is leaking with a special sensor. The meningitis is treated with antibiotics and most people recover without any problems. Once we have found the leak this is repaired surgically to prevent further infections.

#### WHEN DO YOU NEED SURGERY?

If you have a depressed fracture greater than the thickness of the skull then this should be repaired.

If your fracture has brain fluid leaking through then this should be fixed.

If the scalp is cut and the bone is loose underneath then this should be cleaned and repaired in theatre.

With fractures through the bone of the ear if the fluid is leaking it usually stops in about 2-5 days so this may be watched rather than repaired.

If the fracture involves the front of the brain and the air spaces there we find that there is a high risk of infection and so we usually explore these to find and repair any leak.

#### SEE SURGICAL LEAFLETS FOR OPERATION DETAILS

# WHAT YOU SHOULD EXPECT AFTER A SKULL FRACTURE

#### Headaches

These usually improve after a few weeks. If they are getting worse you should contact your doctor.

#### **Tiredness**

This is more from the injury than the fracture itself.  $\label{eq:poor concentration} \textbf{Poor concentration}$ 

This again is from the head injury that went with the fracture

# HOW LONG WILL YOU BE IN HOSPITAL

This will depend on the severity of the fracture and any complications.

If you have a linear fracture and no complications from it you may be able to go home the next or same day. If you have a skull fracture then we know that there is an increased risk of bleeding into the brain so we usually keep you under observation for a while.

If your fracture is compound and as surgery is required it depends on how fast you recover. If the brain is not damaged then you can usually go home in a couple of days.

If the fracture involves the base of the skull you are usually in hospital longer.

### WHAT HAPPENS WHEN YOU GO HOME?

#### **DRIVING**

Not until you are reviewed and instructed that you can do so by your doctor.

#### WORK

You will be instructed by your doctor but usually you will need at least 2 weeks off work even if you have not had surgery. It is common not to return to work for 6 weeks following the fracture.

#### What to watch for?

The complications of epileptic seizures and meningitis do not always present while you are in hospital and can occur much later.

If you have a seizure it is important to have some-one place you in a safe position and to call an ambulance.

If you develop increasing headaches it is important to contact your doctor. If you find clear fluid leaking from your nose it is important to present to your hospitals emergency department.

If you start to become generally unwell, develop a fever or stiffness in the neck or are unable to tolerate bright lights you should have some-one bring you to hospital.



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