# **Clavicle Fractures**

This information refers to fractures of the central third of the clavicle.

Fractures without much comminution (multiple fragments) or displacement, especially in children and young adults, generally heal without the need for surgery. It can take a long time for healing to progress and show on x-rays, with some cases taking 4 – 6 months. Two factors that are under the control of the patient are thought to have a negative impact on healing are smoking and taking anti-inflammatory pills.

#### Surgery

- May be undertaken if the fracture is widely displaced or has comminution (multiple fragments), or if the fracture has not healed after conservative treatment.
- Surgery involves:
  - General anaesthetic
  - o 1 night in hospital
  - Incision over the fracture
  - Fixing the fracture with metal implants usually a metal plate and screws
  - o Sometimes additional bone graft.
- Surgery will not be undertaken if the patient is smoking, as the likelihood of healing is significantly decreased by smoking.

### **Following Surgery**

- Sling for 6 weeks
- Follow-up X-Ray
- Gradual increase in activities after 6 weeks

## **Risks of Surgery**

- Non-healing of fracture (rare)
- Neurovascular injury (rare but potentially very serious)
- Infection/wound problems (rare)
- Irritation from the metal.

There is usually some numbness just below the incision.

If the metal is irritating, it can be removed 1 year post surgery.

#### **Return to Work and Activity Guidelines**

Often the initial return to work is part-time hours and modified duties, gradually building up.

- Sedentary work with arm in sling: 10 14 days post surgery
  - Light two-handed activities: 6 weeks post surgery
  - Medium lifting: providing fracture has healed, 3 months
- **Cycling:** increased risk of problems if heavy fall before fracture healing. Ok to ride a bike when out of the sling but not ok to fall off!

Here is a link, more useful for clinicians, to assess non-union risk:

www.shoulderdoc.co.uk/article/544

