# Fractures Of The Clavicle





#### INTRODUCTION

- A fall on the **shoulder** or the **outstretched** hand may fracture the clavicle; the lateral fragment is pulled down by the weight of the arm, while the medial fragment is held up by the sternomastoid muscle.
- Fracture is usually in the middle 1/3rd of the bone.
- In children- occurs as green stick fracture.



## SPECIAL FEATURES

- The fracture is almost always displaced, producing a lump along the 'collar-bone'.
- Fractures of the outer third are easily mistaken for acromioclavicular injuries.
- Vascular and neurological complications are rare.





# CLINICAL FEATURES

Lump

**Pain** 

Restricted abduction

Vascular complications ( rare)





## **IMAGING**

- X-rays show that the fracture is usually in the middle third of the bone and the lateral fragment lies below the medial. Outer-third injuries need special views to define any fracture.
- A computed tomography (CT) scan is occasionally needed to define the fracture configuration and to exclude a sternoclavicular dislocation.





#### TREATMENT

- For the usual **middle-third fracture**, <u>accurate closed</u> reduction is neither possible nor essential.
- In most cases all that is needed is to **support the arm** in a **sling** until the pain subsides (usually 1–3 weeks).
- Thereafter, active shoulder exercises should be encouraged; this is particularly important in older patients.
- By contrast, outer-third fractures are quite troublesome and may need open reduction and internal fixation.





## **TREATMENT**

Support arm in a sling for 2-3 weeks

Active exercise after 3 weeks





## COMPLICATIONS

• Malunion is inevitable in displaced fractures; in children the bone is soon re-modelled, but in adults the slight deformity has to be accepted unless there is a very unsightly bump with skin irritation.

 Non-union sometimes occurs in middle-third fractures and is treated by bone graft and plating.



