***TRAUMATOLOGY 1***

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**We have talked about General principles in Traumatology in the Introduction. We will now talk about Regional injuries. The regional injuries can be grouped into upper extremities, lower extremities and the spine.**

**I will now introduce you to Injuries of the upper extremities.**

INJURIES OF THE SHOULDER, UPPER ARM AND ELBOW:

The great bugbear of upper limb injuries is stiffness>particularly of the shoulder, elbow and hand. Two points should be constantly borne in mind:

1. **Whatever the injury and treatment is given all the joints that are not immobilized and especially the finger joints should be exercised from the start.**
2. **In elderly patients it is sometimes best to disregard the fracture and concentrate on regaining movement.**

**FRACTURES OF THE CLAVICLE.**

**In children the clavicle fractures easily, but it almost invariably unites rapidly and without complications. In adults the fracture can be more troublesome. It accounts for 2.6-4% of fractures and approximately 35% of the shoulder girdle injuries.**

**Mid shaft- 69-82 %**

**Lateral fractures-21-28%**

**Medial fractures-2-3%**

**Mechanism of Injury.**

**A fall on the shoulder or the outstretched hand may break the clavicle. A fracture with torn ligaments may be severe and closed reduction is impossible.**

**Clinical features.**

**1.Arm clasped to the chest to prevent movement.**

**2.Pain**

**3.A subcutaneous lump may be obvious**

**4.Sharp fragment threatens the skin**

**5.Though vascular complications are rare; it is prudent to feel the pulse and gently palpate the root of the neck.**

**6.Outer third fractures are easily missed or mistaken for acromioclavicular joint injuries.**

**CLASSIFICATION:**

**Fractures based on location,**

**Group I--------Middle third fractures.**

**Group II--------Lateral third fractures**

**Group III -------Medial third fractures**

**DIAGNOSIS.**

**History.**

**Clinical features**

**Investigations’=RAY OR CT SCAN.**

**TREATMENT.**

**Middle Third fractures:**

**Un-displaced fractures should be treated Non-operatively.**

**Apply simple sling for comfort 1-3 weeks.**

**Analgesics.**

**Figure of 8 is discouraged because it increases risks of non-union.**

**Internal fixation in cases of severe displacement—Using contoured locking plates or intramedullary fixation.**

**Lateral Third fractures.**

**Do a sling for 2-3 weeks.**

**Analgesics.**

**Mobilization when pain subsides.**

**Marked displacement, open reduction is done. Techniques include use of a coracoclavicular screw, plate and hook plate fixation and suture and sling with Dacron graft ligaments.**

**Medial Third fractures.**

**Non-operative management, should operation be done:**

**K-wires are used.**

**Suture and graft.**

**Locking plates.**

**COMLICATIONS:**

**Early.**

**Pneumothorax.**

**Damage to the subclavian vessels and brachial plexus.**

**Late.**

**Non-union>1-15% for lateral #s 11-40 %**

**Open reduction is done.**

**Mal-union.**

**All displaced fractures heal with mal-union.**

**Shortening and Angulation.**

**Stiffness of the shoulder joint.**

**Early mobilization is important.**