FRACTURE MANAGEMENT

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FRACTURE MANAGEMENT

- 3 STAGES
- REDUCTION
- IMMobilisation
- REhabilitation
REDUCTION

• Manipulation of the bone to it’s correct position

• Poor position = malunion = deforming or loss of bone length = muscle shortening and altered weight bearing
HEALING TIMES

- 2 STAGES
- UNION (3-10 WEEKS)
  - Partial repair of bone
  - Initial callus forms around the bone ends = minimal movement
  - Still painful
  - # line visible on x-ray
HEALING TIMES

- CONSOLIDATION (Double union time)
  - Full repair of bone
  - No movement at # site
  - No line on x-ray
  - Full function
  - Activities can start
EXAMPLES OF HEALING TIMES

- # Humerous
  - 6-8 weeks union 12-16 weeks consolidation
- # Femur
  - 3-6 months union 8-12 months consolidation
- # Tibia 8-10 weeks union 16-36 weeks consolidation
IMMOBILISATION

- **Aim** to hold the bone in the correct reduced position by
- **Conservative** – POP-slings–traction–collar & cuff
- **External fixation** – Bone fragments held by external scaffolding
- **Internal fixation** – screws- plates- nails-wires
REHABILITATION

- Return person to as full function as possible
- Start as soon as # reduced
- Earlier mobilisation better the prognosis
- Ensure pain is controlled
COMPLICATIONS

- Delayed union # longer to heal than usual
- Non-union # does not unite in time frame
- Mal-union # unites in poor position
- Shortening of limb, muscle and bone
- Joint stiffness/contracture
- Infection
- AVN…avascular necrosis
- Osteoarthritis…fractures involving joints