ORTHOPAEDIC WORKSHOP

21st NATIONAL FAMILY PRACTITIONERS CONFERENCE "Family Medicine and the Circle of Life"

NJ KAUTA
SPECIALIST ORTHOPAEDIC SURGEON

BACK GROUND

• Distal radial fractures

• Paediatric distal humerus fractures

Discussion topics

- Define indications for surgery
- Describe the closed reduction technique for the most common type of distal radius fractures.
- Common complications with non operative and operative treatments

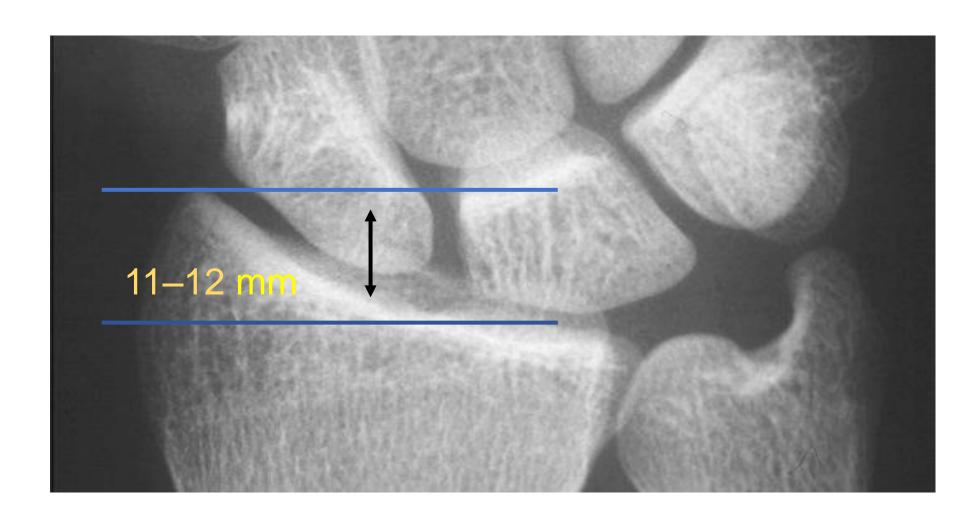


Distal radius fractures

- 25 % of all paediatric fractures
- 22% of all elderly fractures

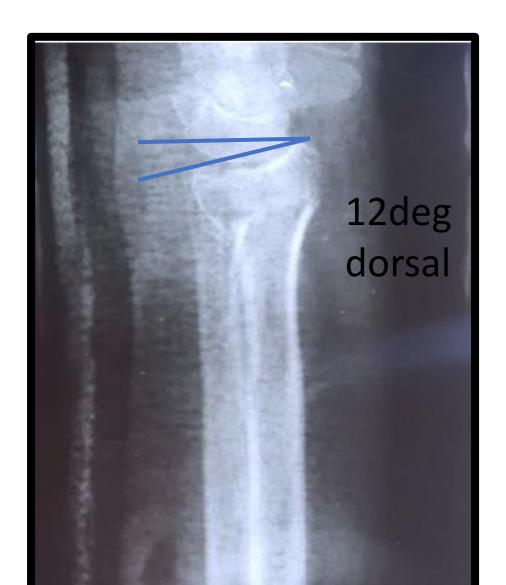
 Incidence rising for the young adult distal radius fractures

Normal values—radial length



Normal values—palmar tilt





Normal values—radial inclination



23°

Normal values—ulnar variance



0 mm

Indications for surgery

- Failure of non operative treatment
- Open fractures
- Acute carpal tunnel syndrome
- Intraarticular step or gap > 2mm
- Patient preference(private patients)



Operative options

- Closed reduction and External fixation
- Closed reduction and K wiring
- Open reduction and K wiring
- Open reduction and internal fixation(plate and screws)

External fixation





ORIF



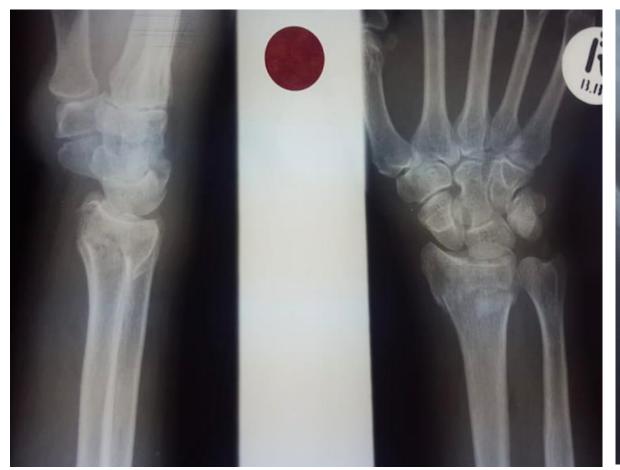


Complications of closed treatment

- Acute carpal tunnel syndrome
- Malunion
- CRPS
- EPL tendon rupture
- Prolonged recovery time(multiple visits to the doctor)

Complications of ORIF

- Acute carpal tunnel syndrome
- Median nerve injury
- FPL tendon rupture
- Infection
- Malunion











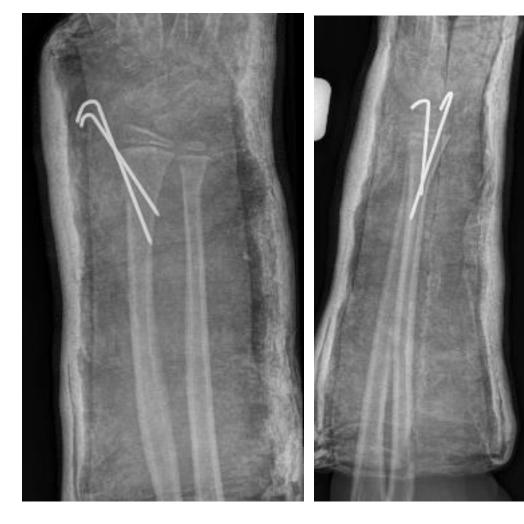












ORTHOGERIARTRIC AND FAMILY MEDICINE

• Distal radius fracture, most common sign of osteoporosis

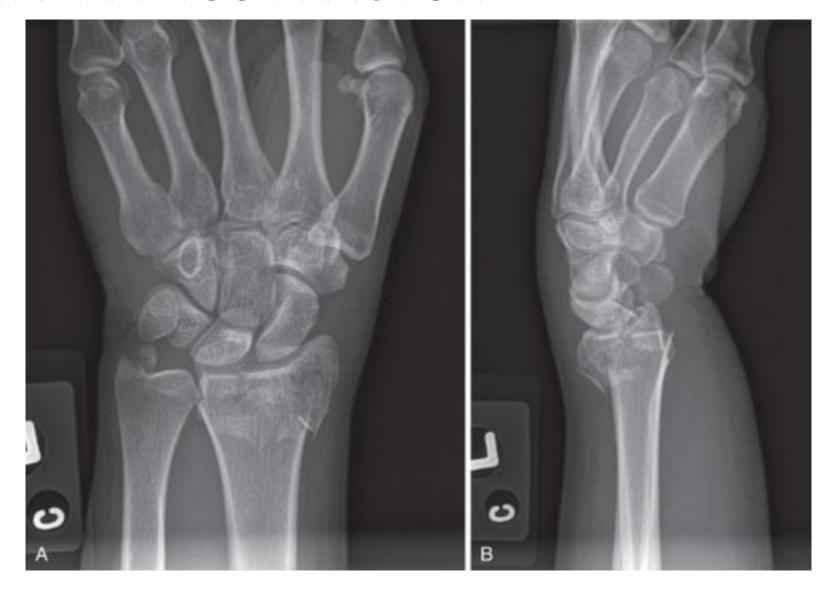
- Only 2 to 4% of patients with fragility fractures of the wrist are investigated for osteoporosis.
- Osteoporosis is a silent killer

• Early management can help prevent up to 60% of major osteoporotic fractures.

MUA AND POP FOR DISTAL RADIUS

DEMONSTRATION OF REDUCTION TECHNIQUE AND APPLICATION OF A BACK SLAB/POP

DISTAL RADIUS FRACTURE



PEADIATRIC DISTAL HUMERUS FRACTURES

 Very common injuries (approximately 65% of pediatric trauma)

Radiographic assessment - difficult for non-orthopaedists

A thorough physical examination is essential

Watch out for Compartment syndrome

Clinical presentation

Acute history (same day presentation)

 Delayed presentation: 2 days or more, rule out: - infection or pulled elbow if xrs normal – Non accidental injury(NAI)

Clinical exam: swelling, deformity, neurovascular supply (AIN, UN, brachial artery)

Paediatric elbow

Ossification centers



1	С	Capitulum	
3	R	Radial Head	
5	1	Internal Epicondyle	
7	Т	Trochlea	
9	О	Olecranon	
11	L	Lateral Epicondyle	

Occult elbow fractures: posterior fat pad





Normal radiographs







Supracondylar fractures





Supracondylar fractures





Supracondylar fractures



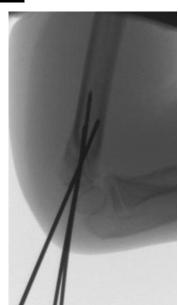


















Complete distal hueral transphyseal separation





Lateral condyle fractures















Medial epicondyle fractures





Medial epicondyle fractures



