

Dynamic external fixation for PIP fracture- dislocations

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Complex problem



Anyone
can fix
a finger!



- Splinting
- Open reduction & internal fixation
- K-wire stabilisation
- External fixation
 1. Static
 2. Dynamic
- Fusion
- Arthroplasty
- Replacement



Dynamic external fixation

- Easy
- Quick
- Not affecting fracture site
(ligamentotaxis)
- Immediate mobilisation
(enhance cartilage and joint remodelling)
- Cheap



Indications

- Unstable fractures of base of middle phalanx
- Unstable dislocations of PIP joint
- Flexion deformity of PIP joint (?)
- In combination with ORIF

Contra-indications

- Sepsis
- Bone loss
- Condylar fracture of P1
- Previous neurovascular repair
- (Collateral ligament injury)

Technique

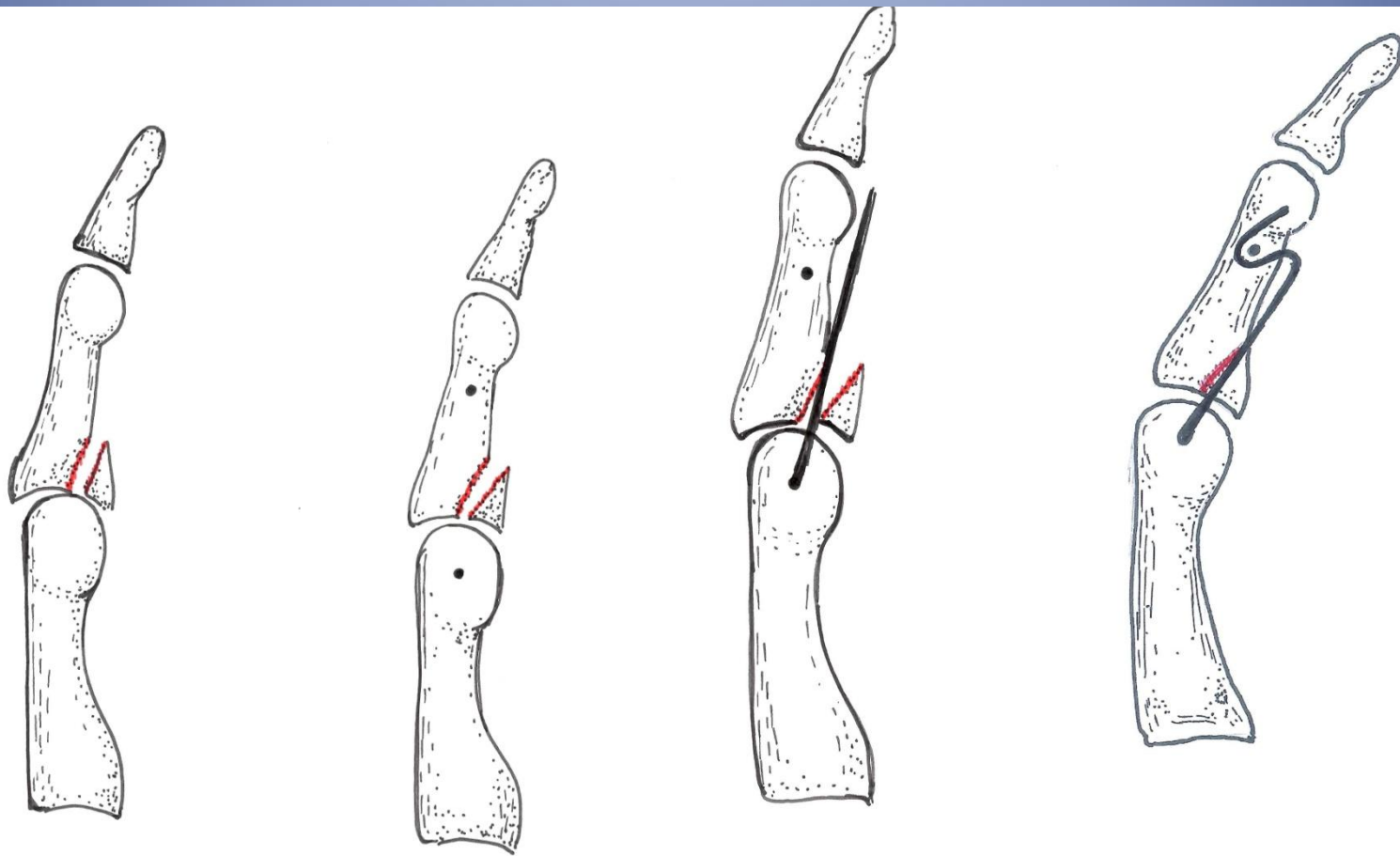
- Local anaesthesia
- No tourniquet
- X-ray
- two or three 1.4mm K-wires



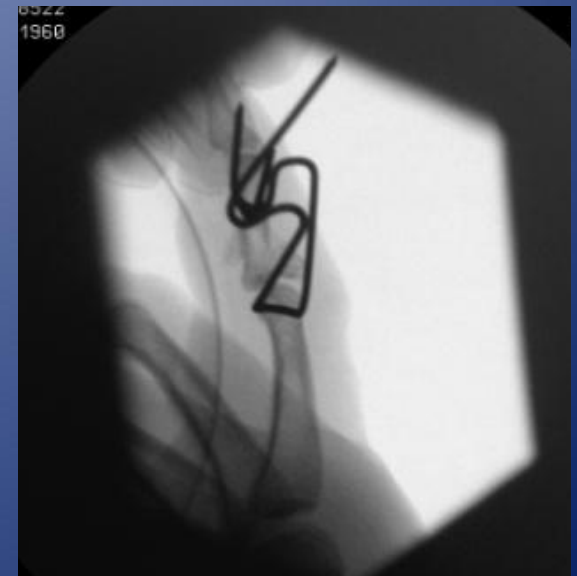
How I do it

- Compliant patient
- Local anaesthesia
- Confirm that joint is reducible
- Insertion of wires
- Bending of wires and formation of frame

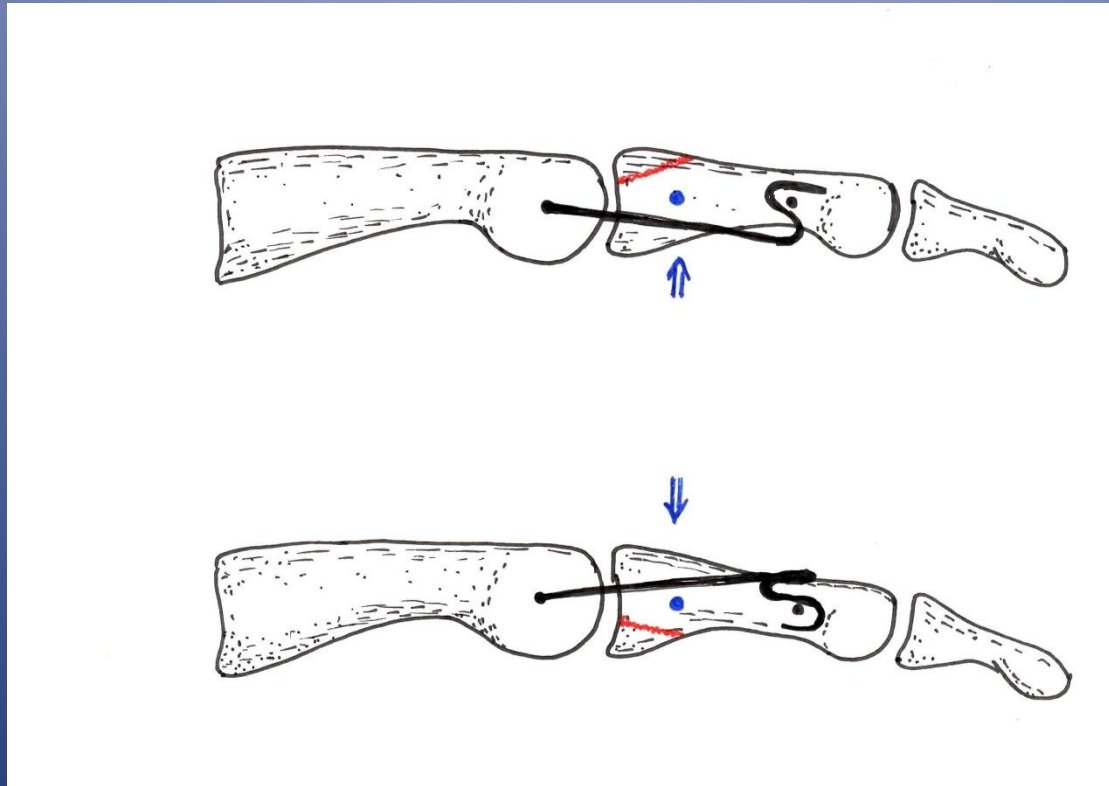
How I do it



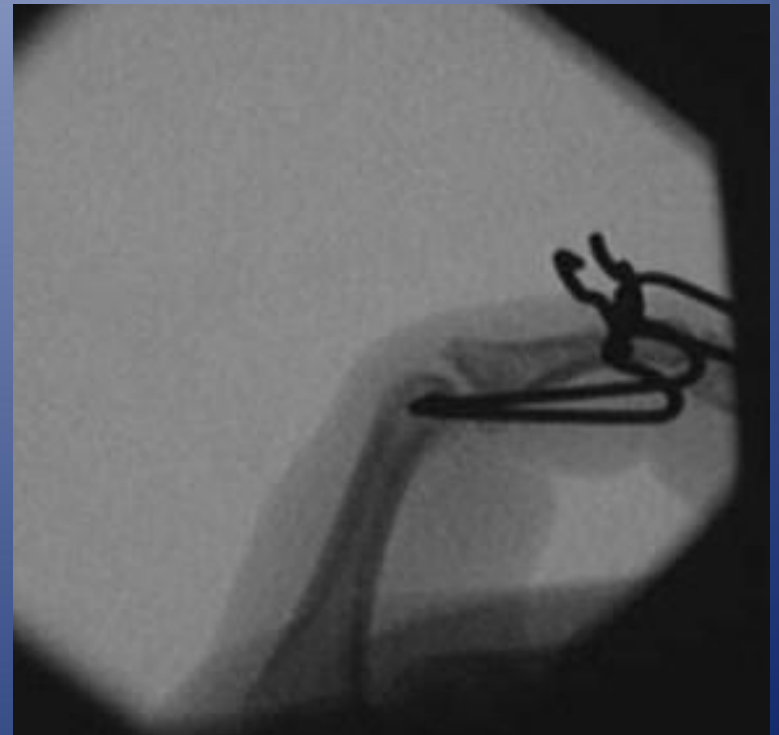
Radiographs



The third K-wire



Immediate mobilisation





Technique

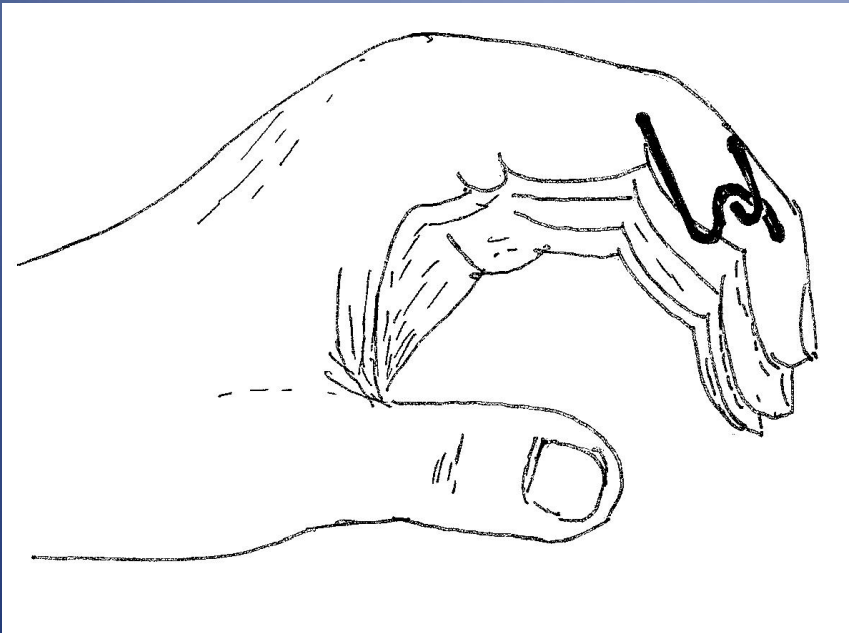
- No incisions- no dressings
- Chiro clips
- Keeping finger dry
- X-ray check in 2 weeks
- X-ray check in 4 weeks and removal of frame in clinic

Complications

- Loss of reduction
- Pin site infection
- Stiffness



“Homemade” vs commercial



- Minimum cost
- Minimum invasion
- Minimum problems
- Right indications

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Thank you