

Closed reduction and dynamic external fixation for fracture dislocations of the proximal interphalangeal joint

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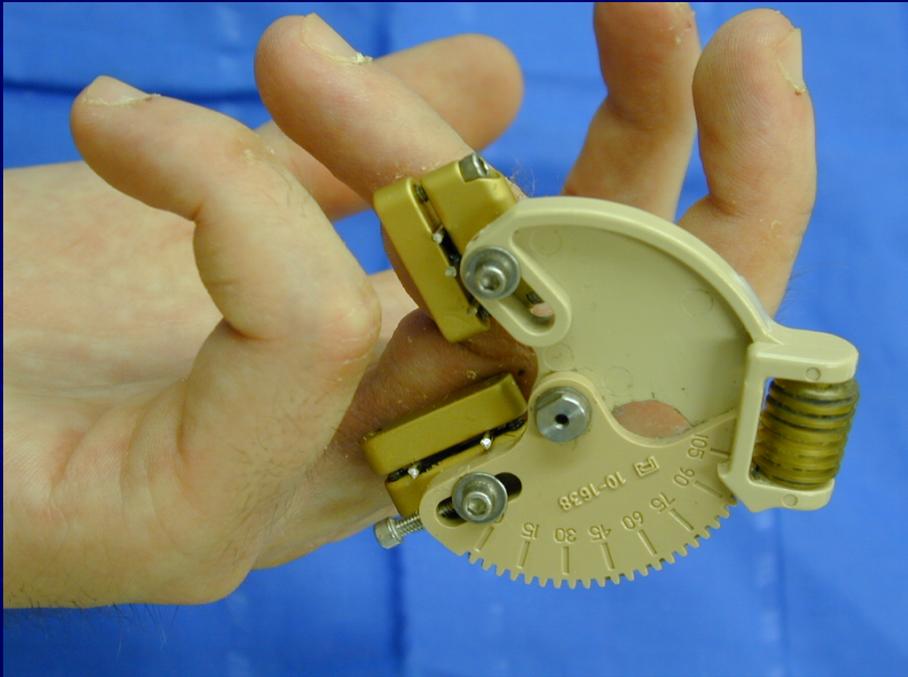
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PIP fracture dislocations



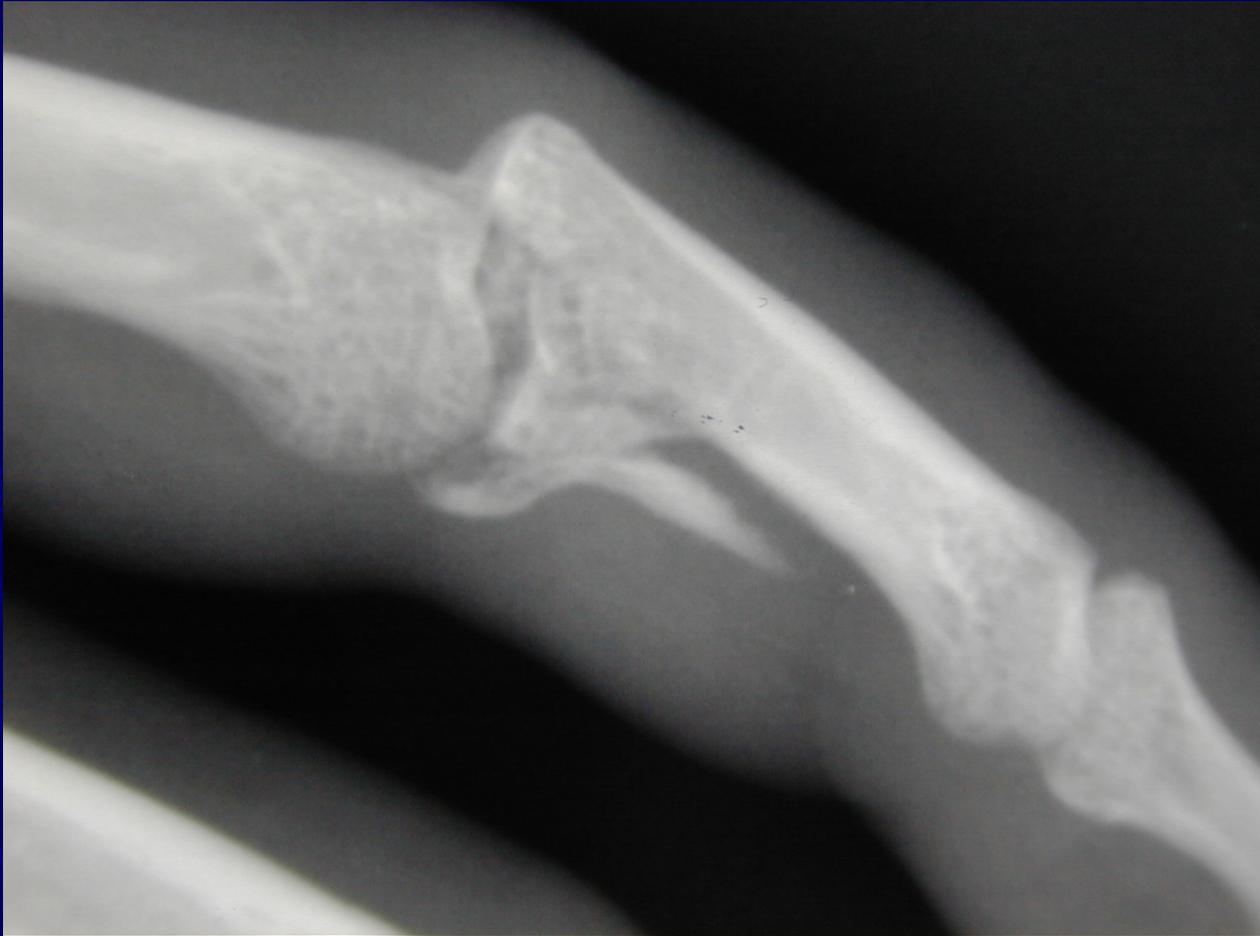
- ▶ Pain
- ▶ Stiffness
- ▶ Chronic instability
- ▶ Degenerative changes

Compass PIP Hinge

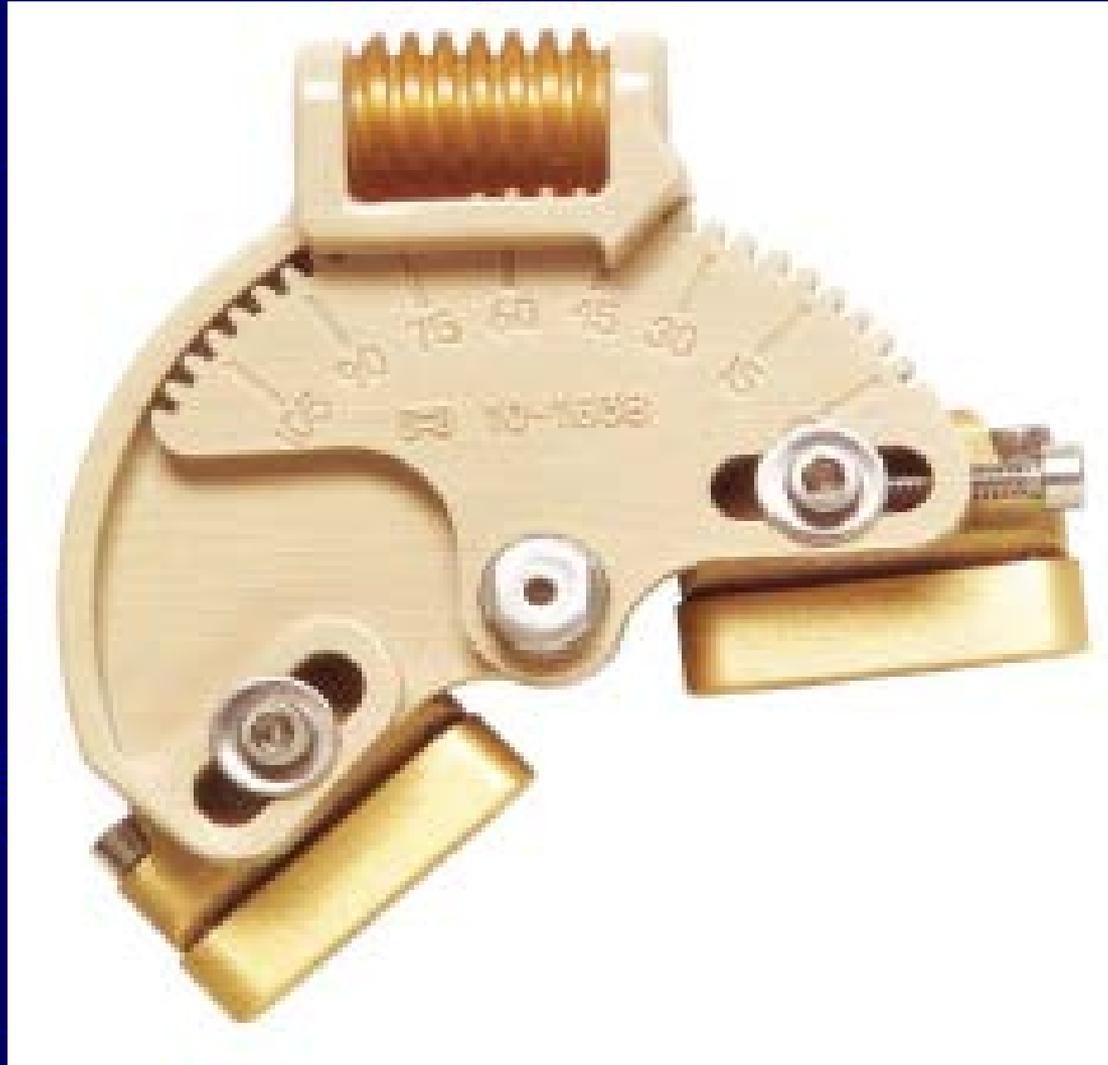


- ▶ Stability
- ▶ Distraction
- ▶ Passive ROM exercises
- ▶ Active ROM exercises

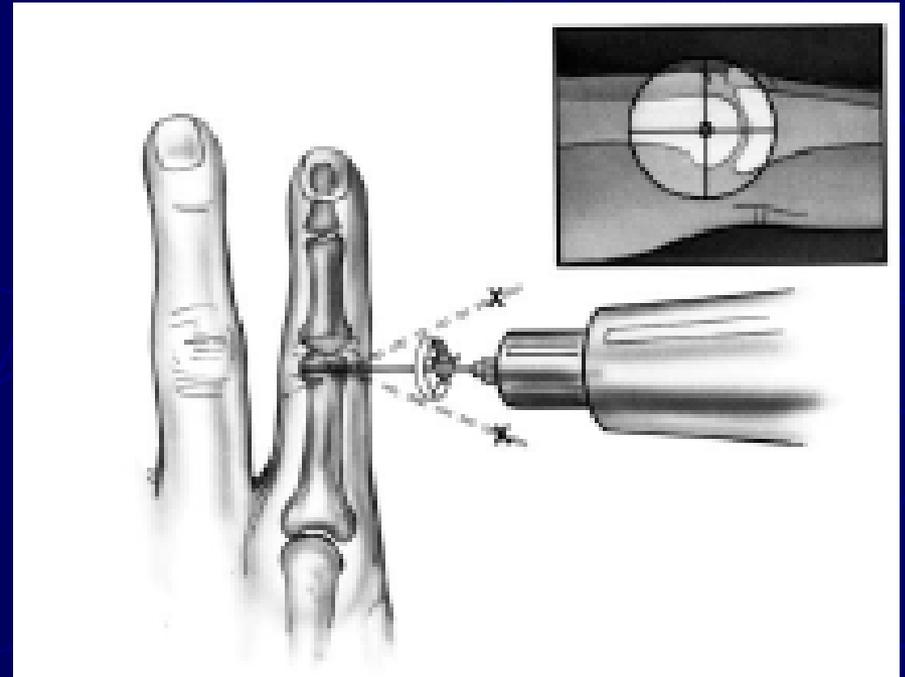
Operative technique



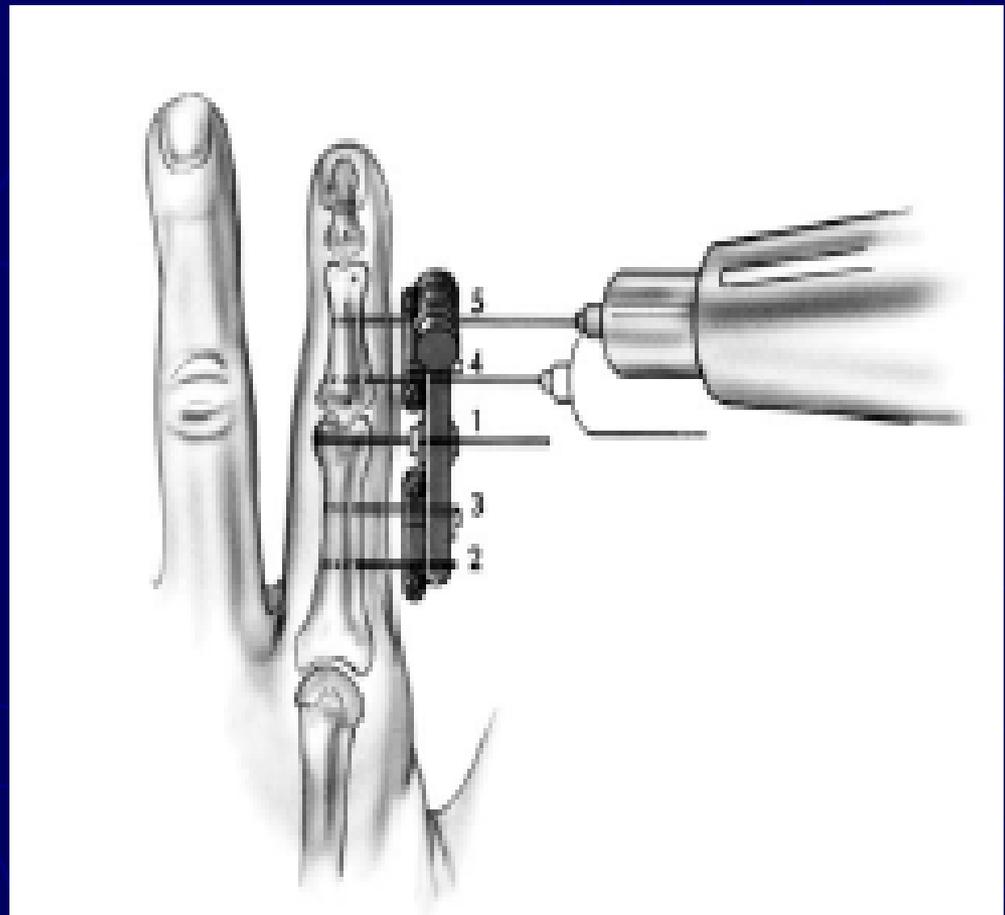
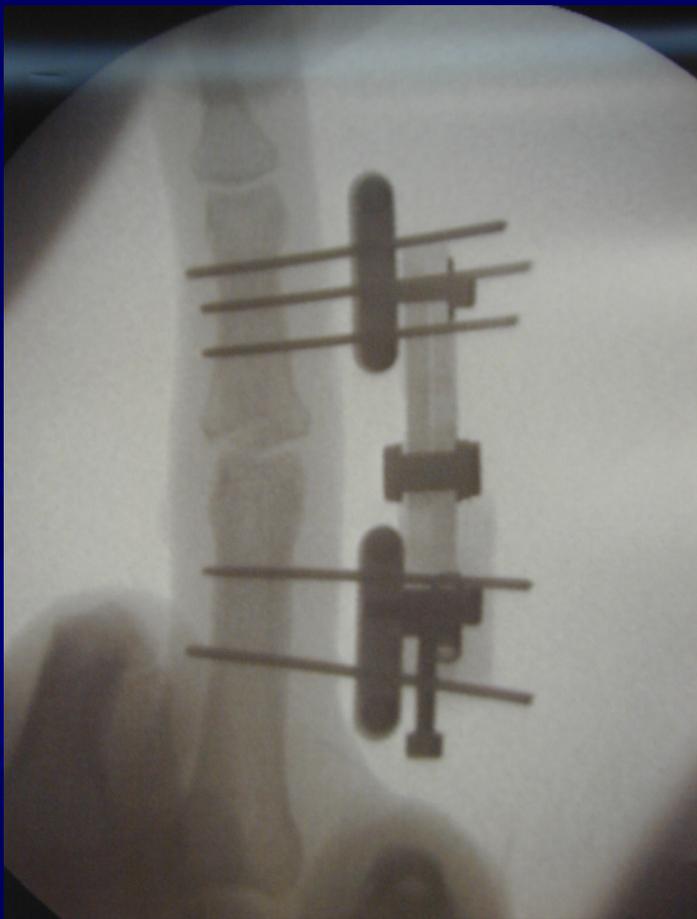
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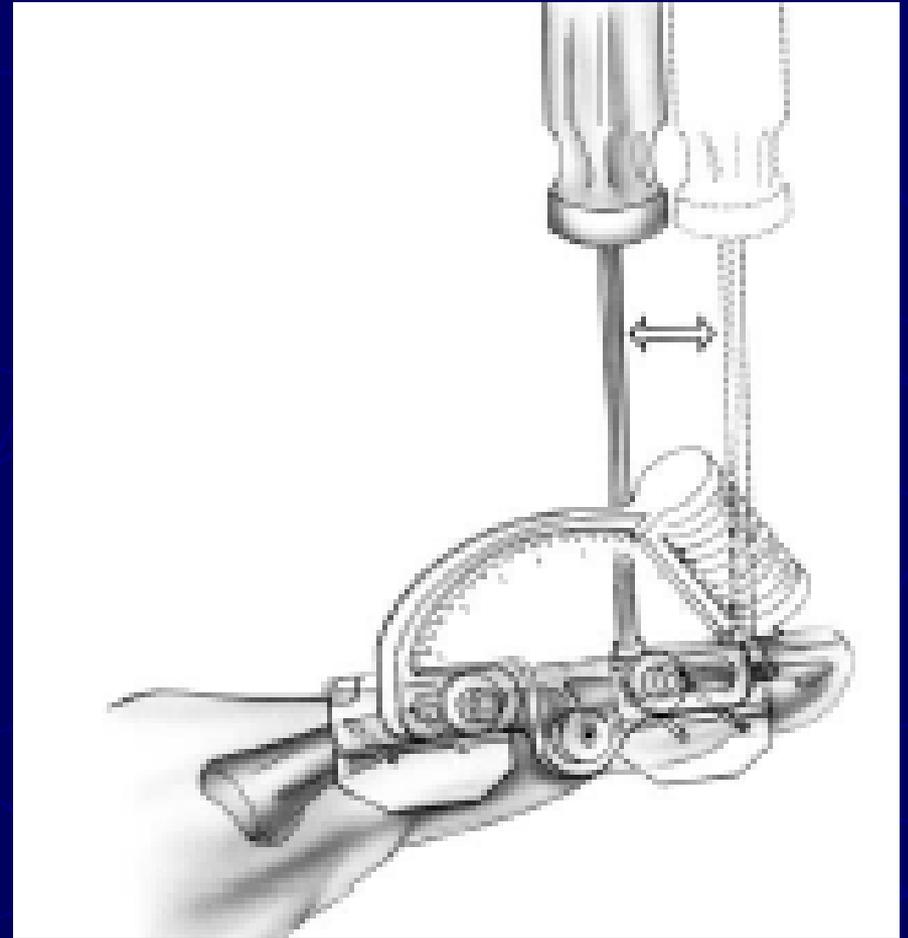
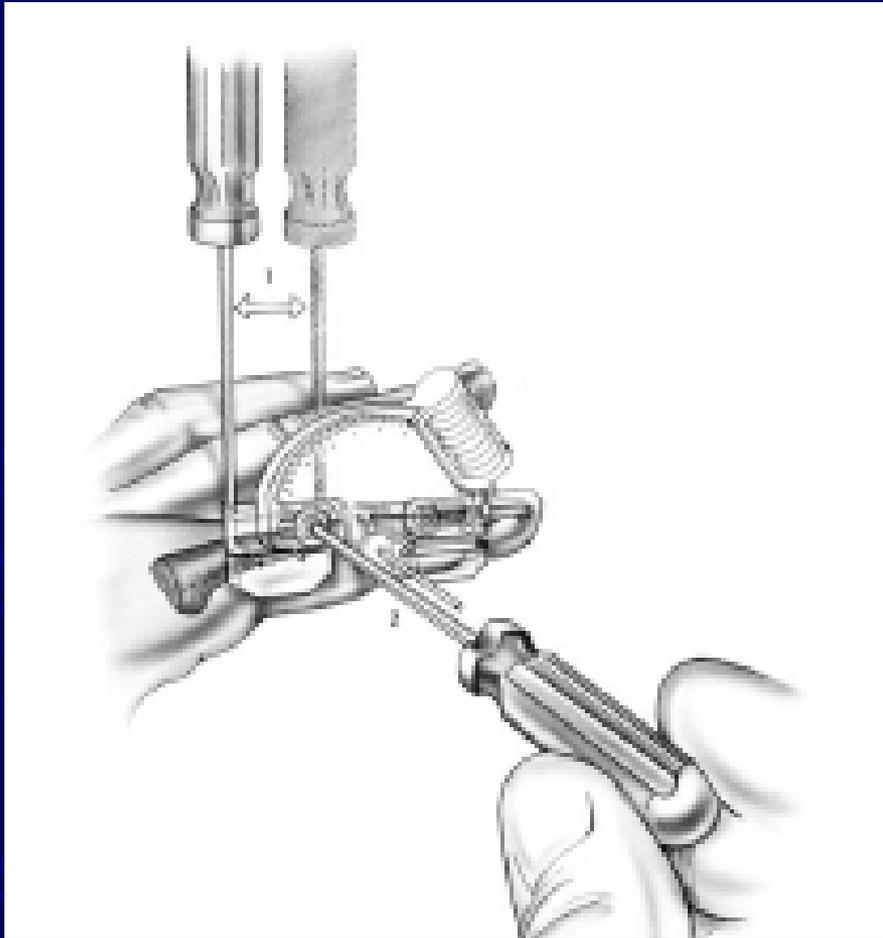
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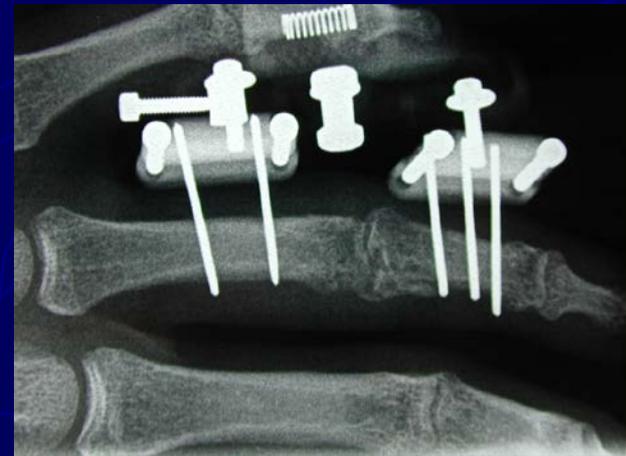
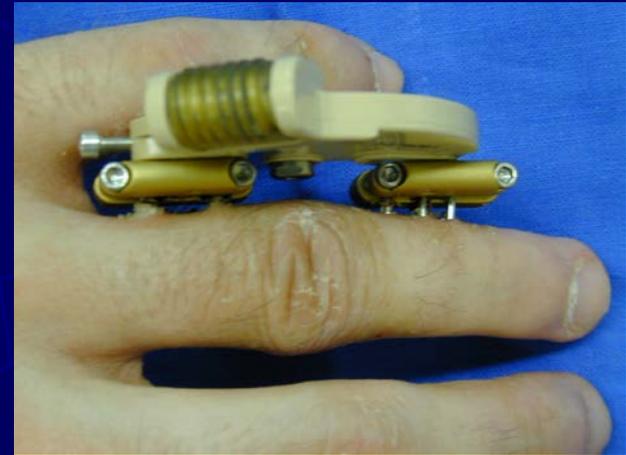
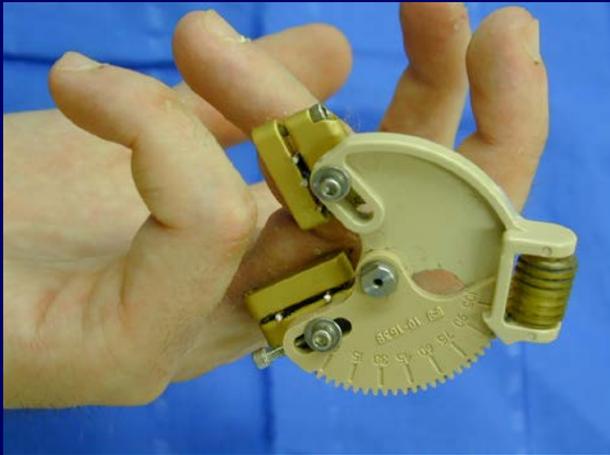
Operative technique



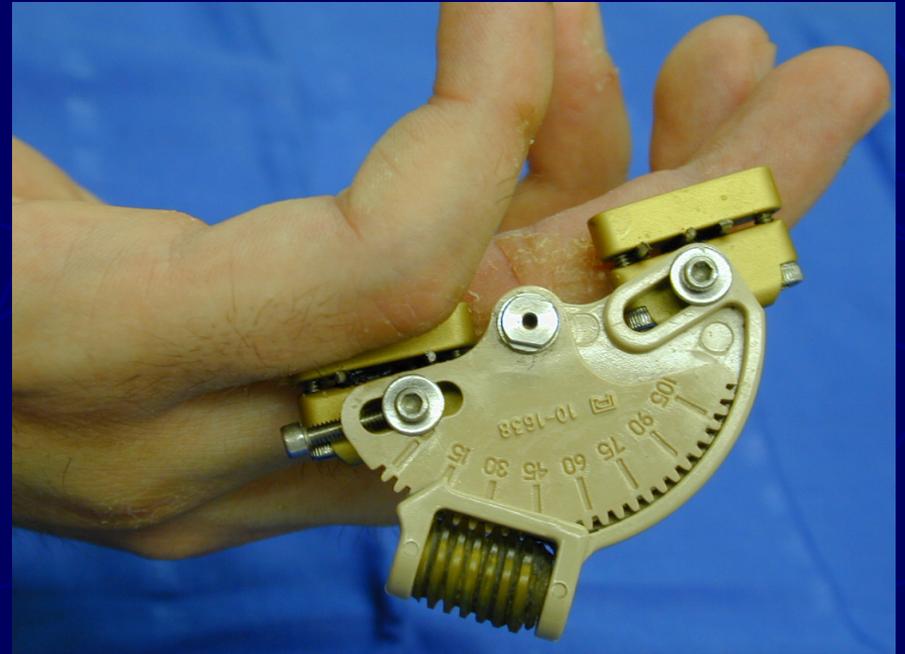
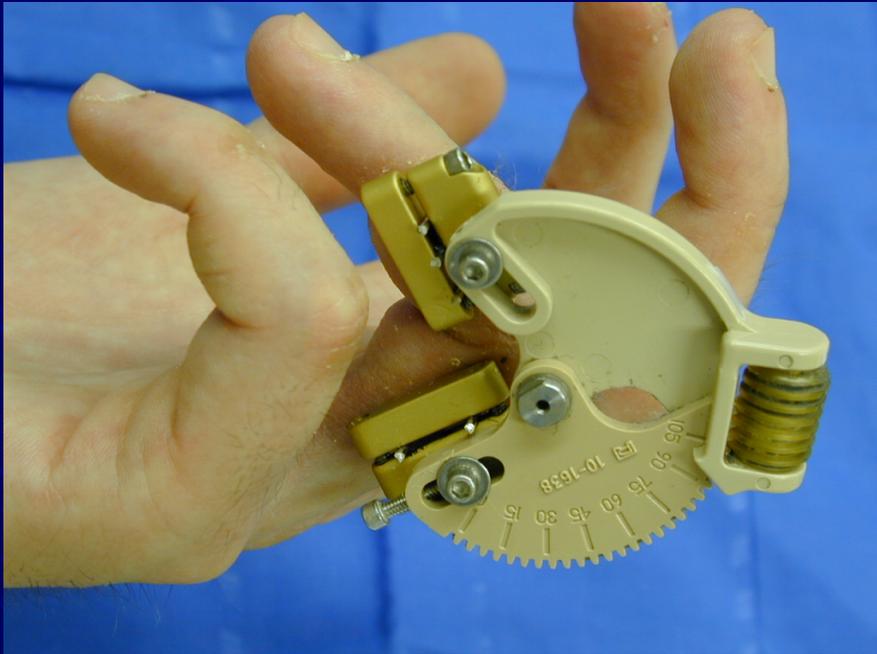
Operative technique

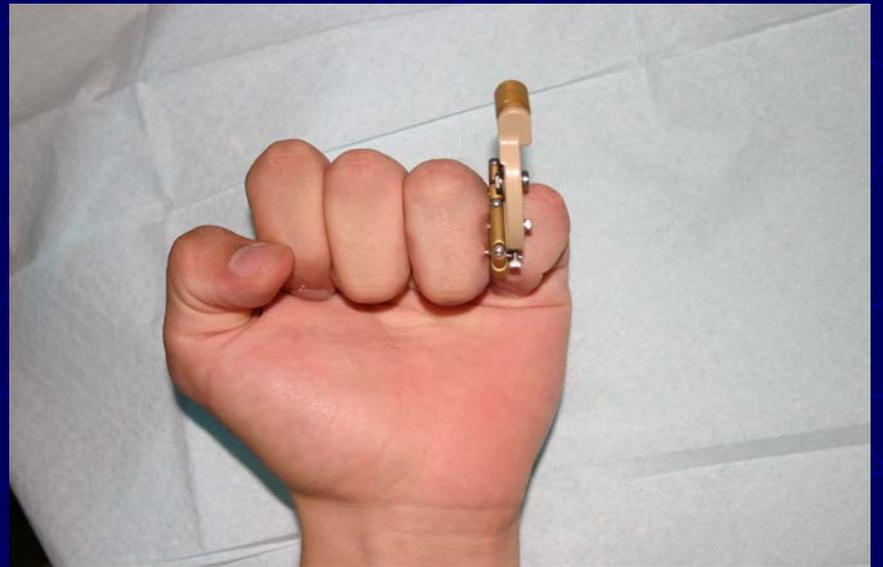
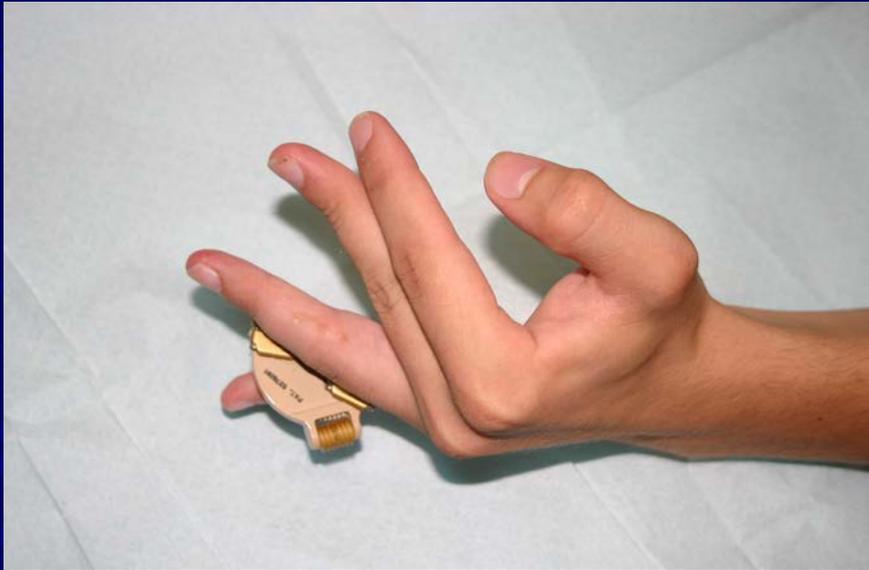
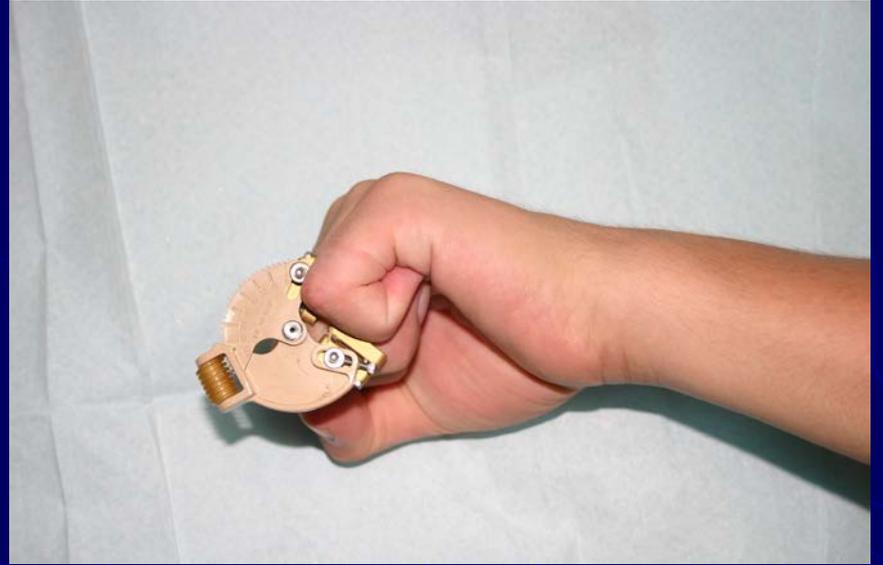
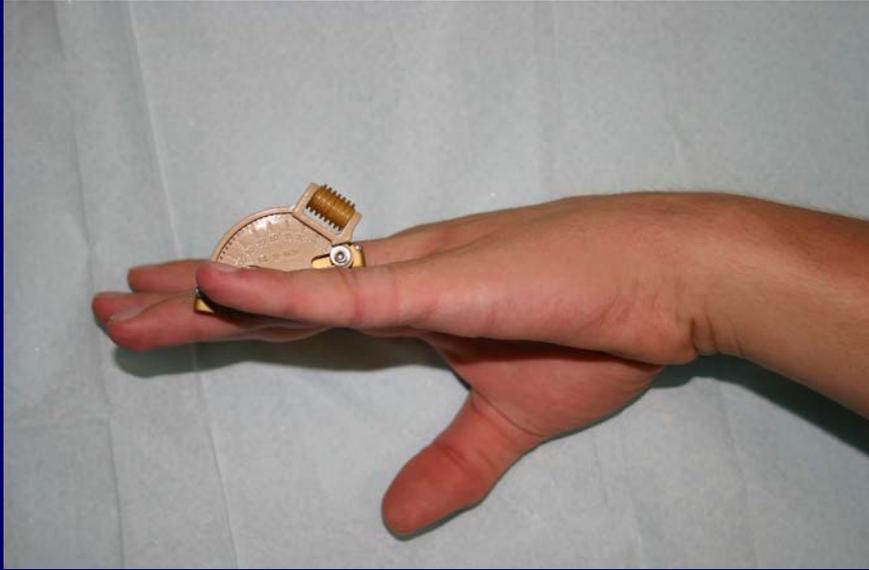


Operative technique



Postoperative care









Study

- ▶ 12 PIP fracture dislocations treated with closed reduction and Compass PIP Hinge
- ▶ Average age: 24 years old (range 16 to 42)
- ▶ Average time from injury to surgery: 31 days (range 0 to 59)
- ▶ Hinge was in place for average of 46 days

Results

- ▶ Visual analogue scale:
 - Average: 8,75
 - Range 8 to 10

- ▶ Average range of motion:
 - 5° of extension
 - 88° of flexion

Results

- ▶ 1 pin tract infection: responded well to short course of oral antibiotics
- ▶ 1 breakage of pin: only noticed at removal of the external fixator

Conclusion

A hinged external fixator gives satisfactory results for the treatment of fracture dislocations of the PIP joint