

Distal Radius Fractures: Case Study



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Disclosure



Union Surgical, LLC



18 year old male college student



- A. Reduce and cast if reduction acceptable**
- B. Proceed directly to fixation**

Evolution of Treatment



1st and still popular is cast/splint immobilization

Problem; fracture redisplacement

>60% Mackenney, McQueen, and Elton JBJS 2006

Cast Treatment ?



• **Injury
Films**



Post-Reduction Films



“Not perfect but OK ?”

1 Week Post-Reduction



2 Weeks Post-Reduction



Denial stage

4 Weeks Post-Reduction



Cast rx often fails to maintain reduction

Lafontaine's Criteria of Instability 5 "Gravity Factors"

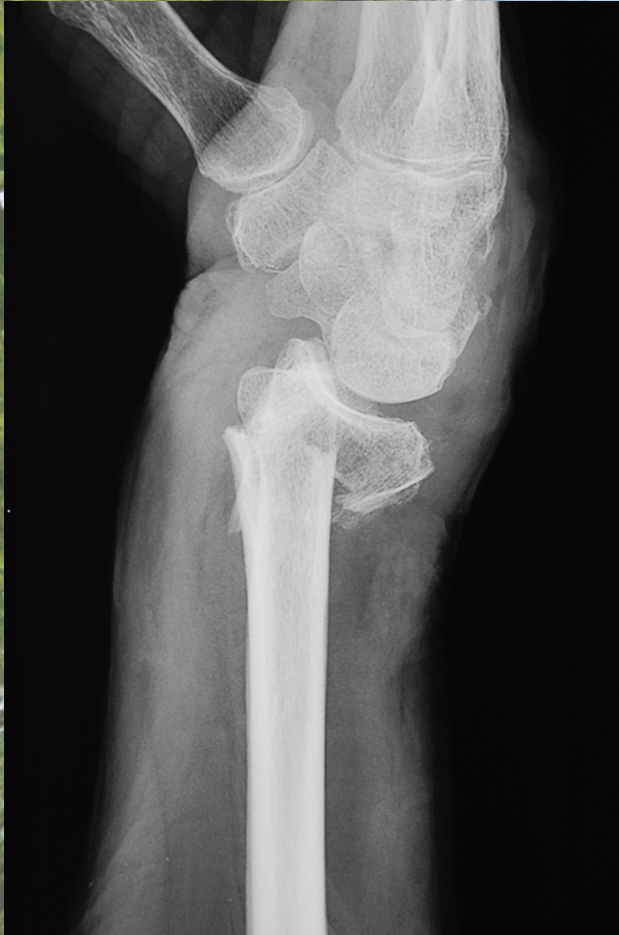
- 1 Initial dorsal angulation
greater than 20°**
- 2 Dorsal comminution**
- 3 Radiocarpal intra-articular
involvement**
- 4 Associated ulna fracture**
- 5 Age > 60 years**



**Malunion post cast
#1 UE malpractice suit**



Kapandji Case



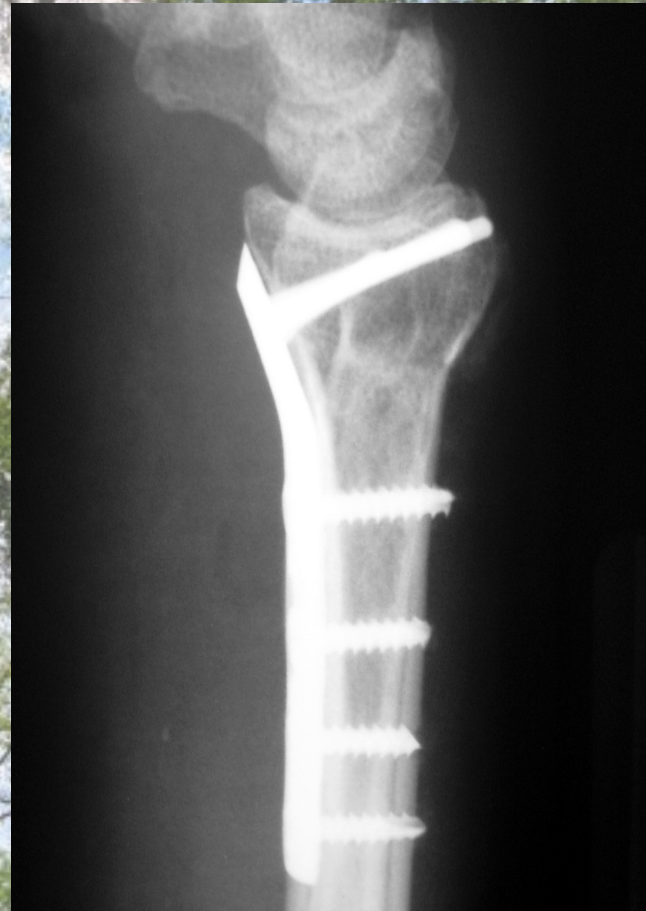
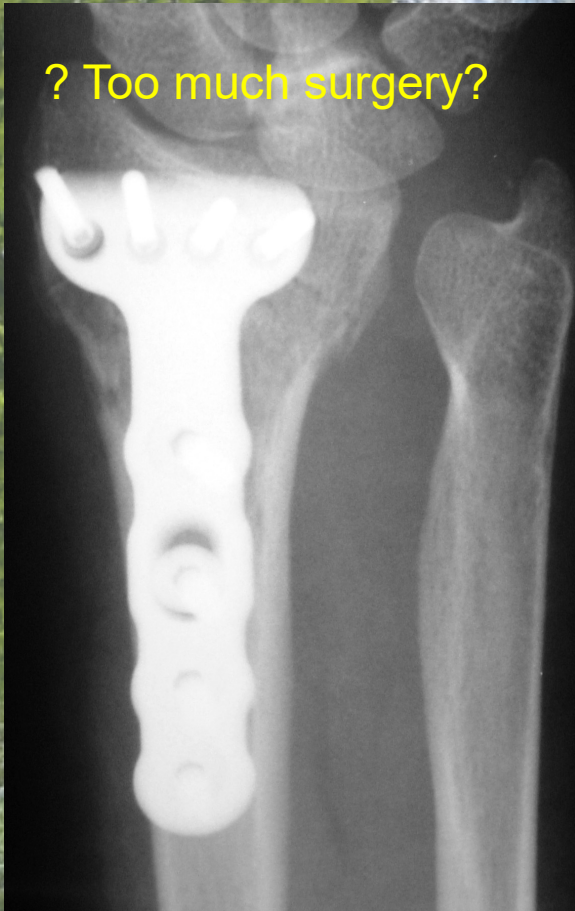




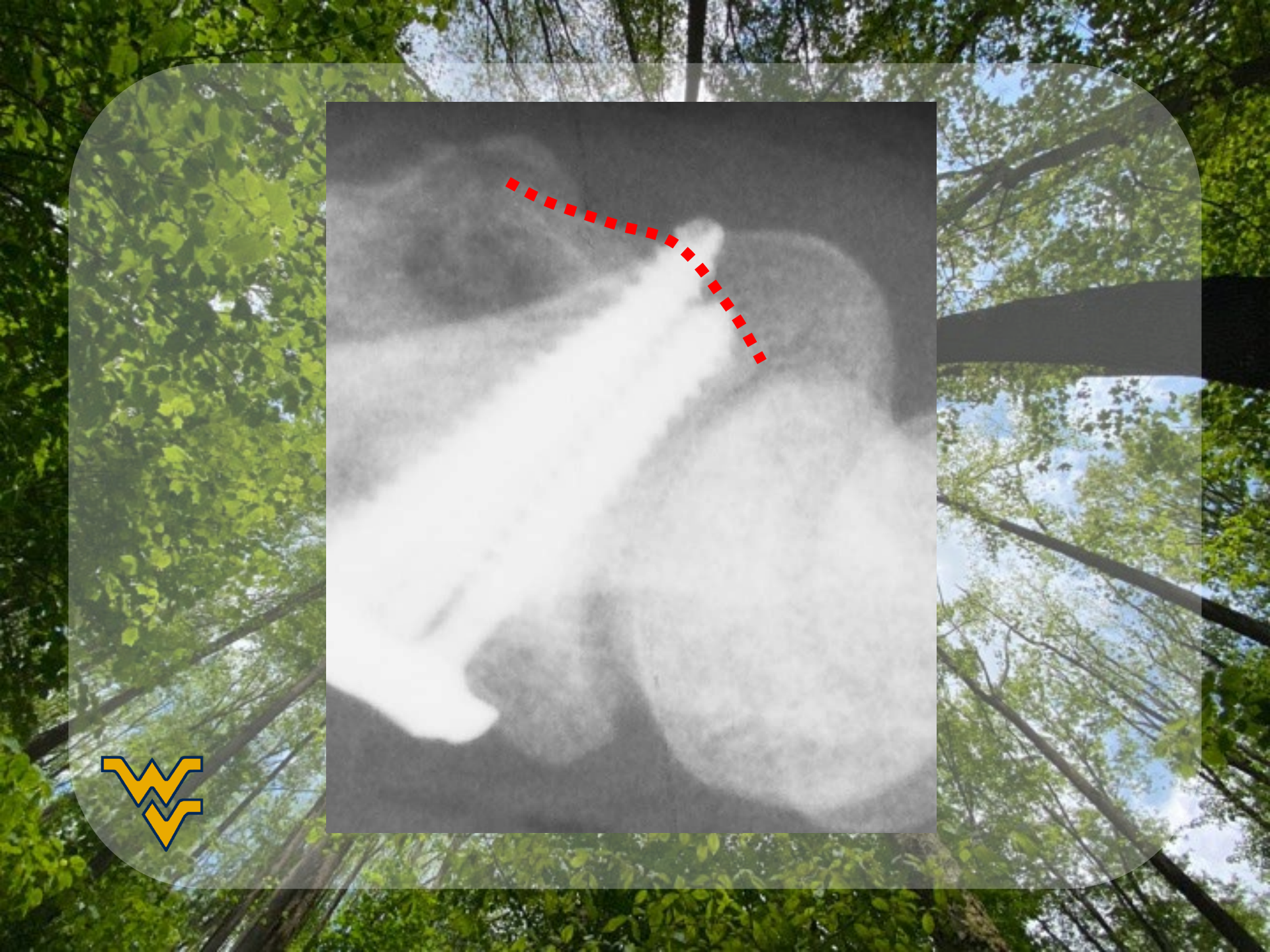


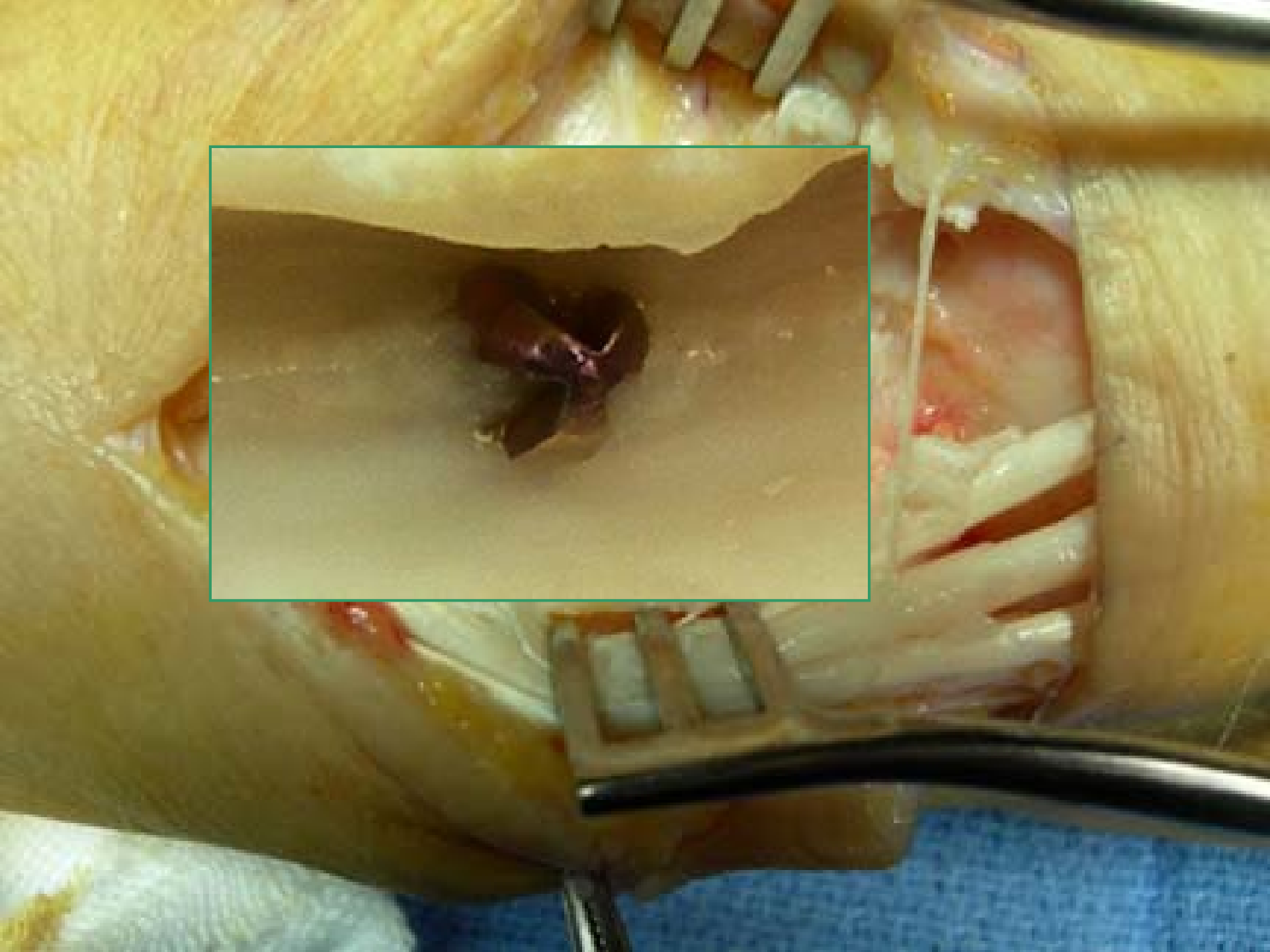
Volar Fixed Angle Plating

? Too much surgery?



Koval JBJS 2008; shift to internal fixation for treatment of distal radius fractures despite lack of improvement in surgeon perceived functional outcomes

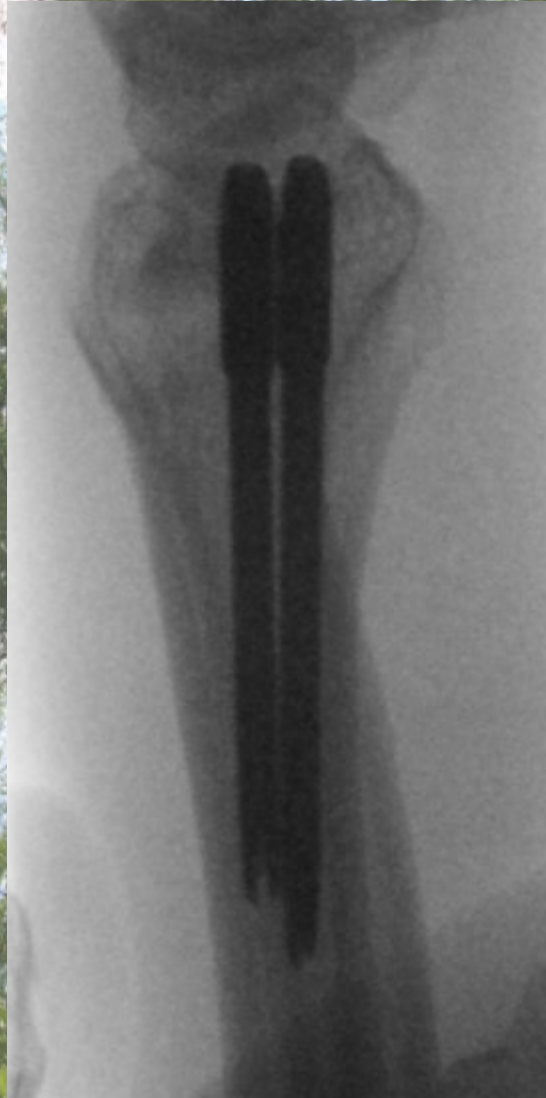




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**My solution:
T-Pin®**

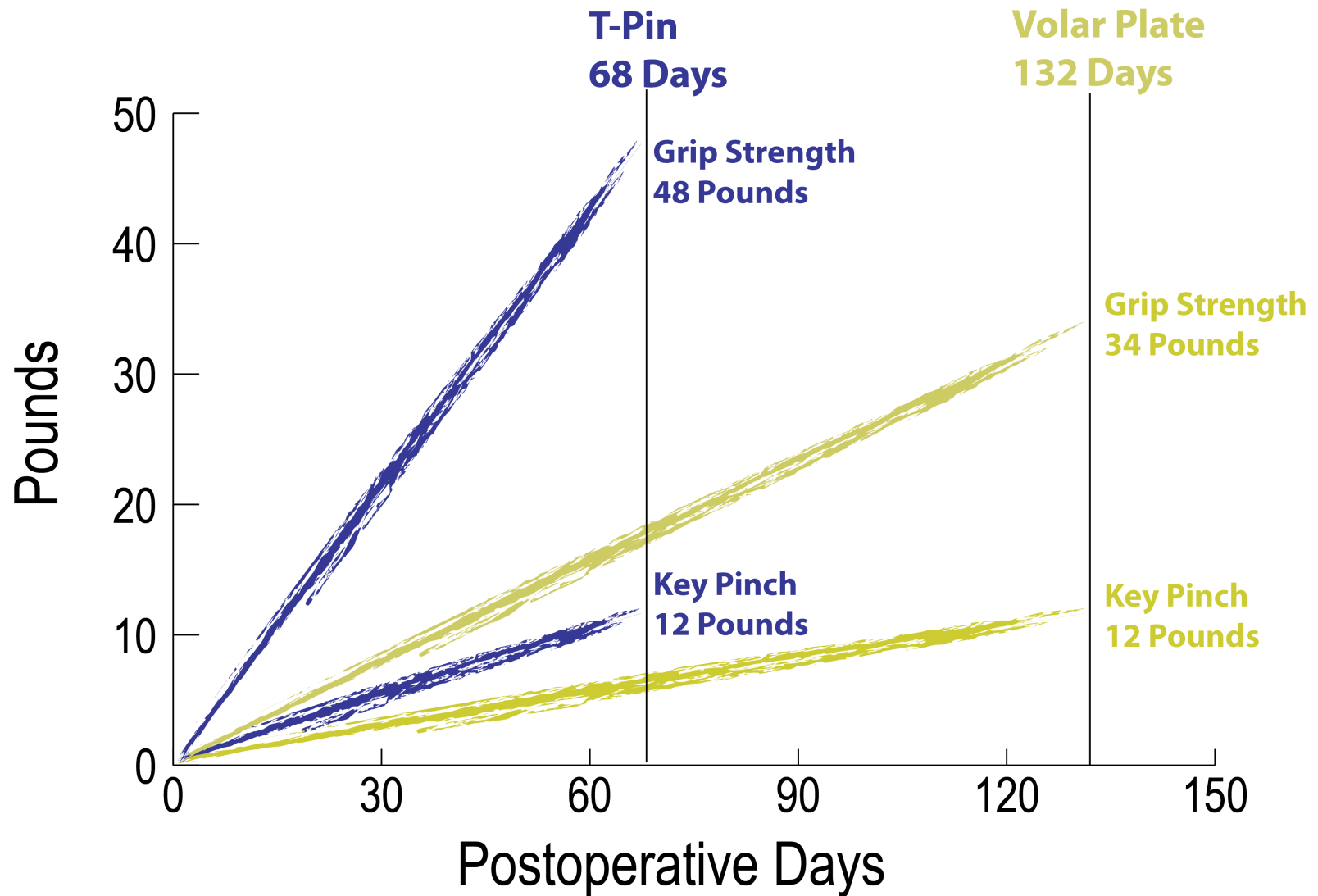


58 year old woman

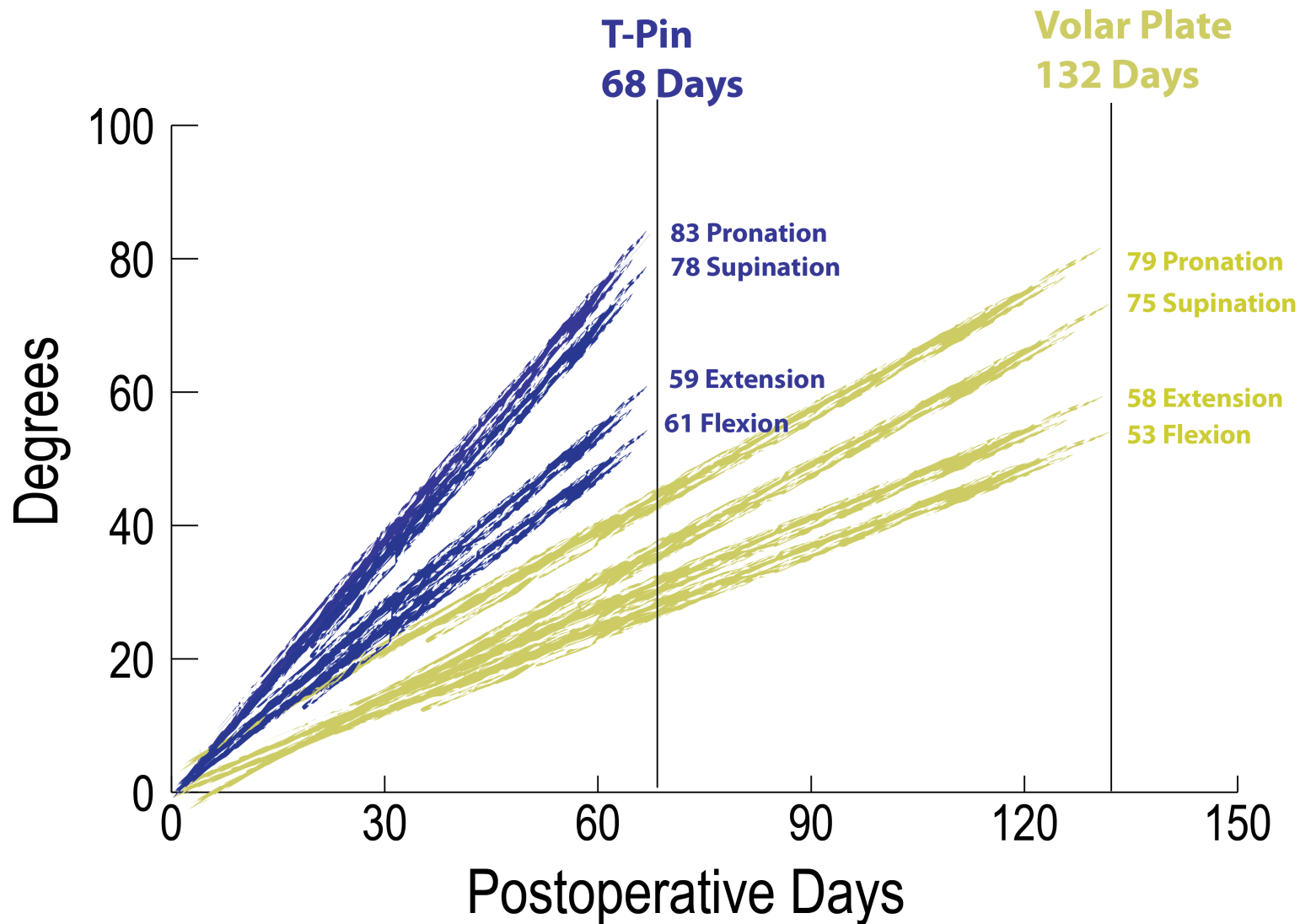




JAMAR Grip Strength and Key Pinch vs PostOp Days to Therapy Discharge



Range of Motion vs. PostOp Days to Therapy Discharge



Thank you

