Simulated CBDs for PAH SpRs Project

Mr Simon Wimsey

Hand Surgery Topics

Hosted on www.school-of-Andry.com

CASE #1

78 year old lady
Presents with bilateral hand and finger pain for 1 year

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CASE #1

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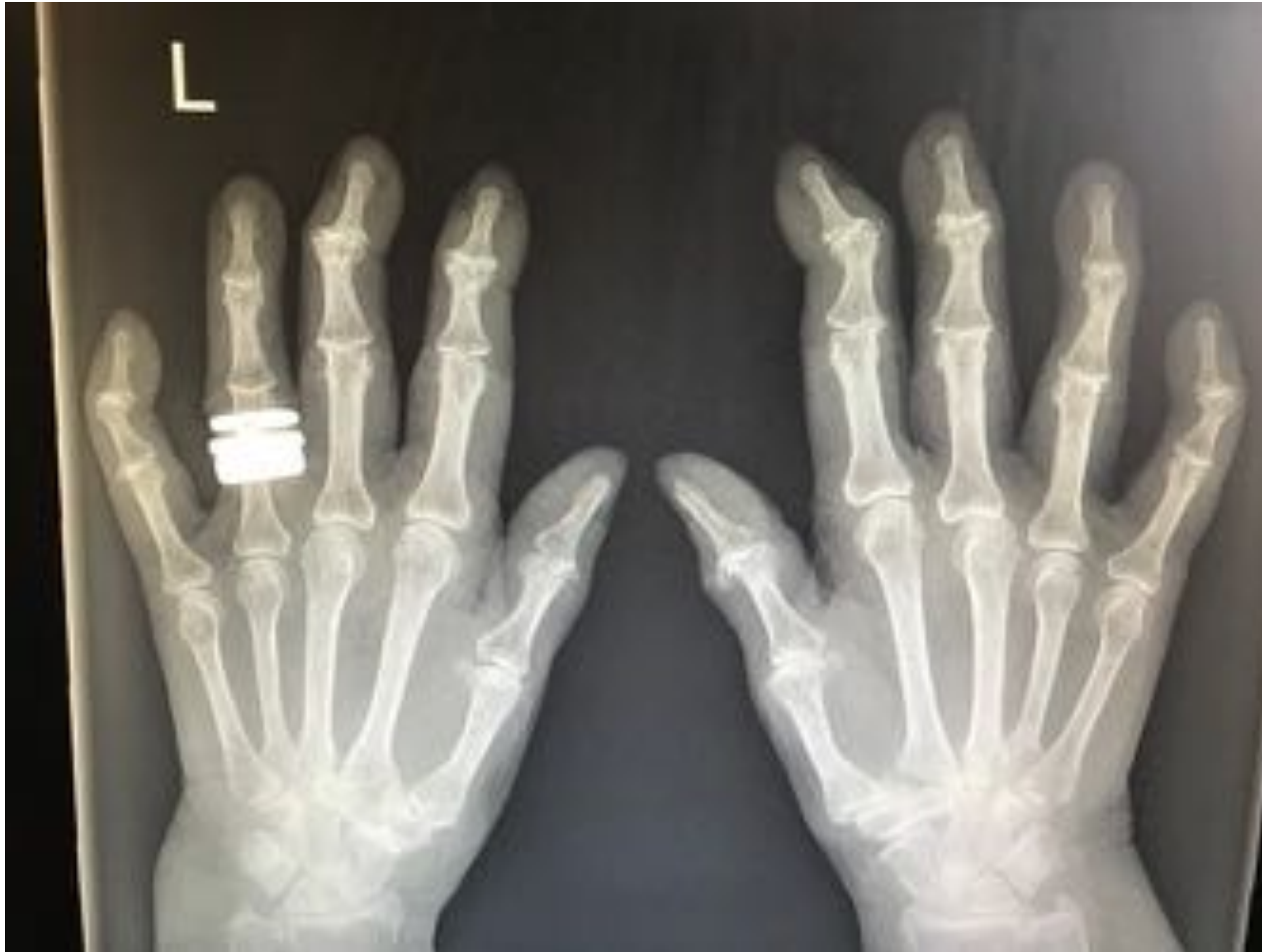

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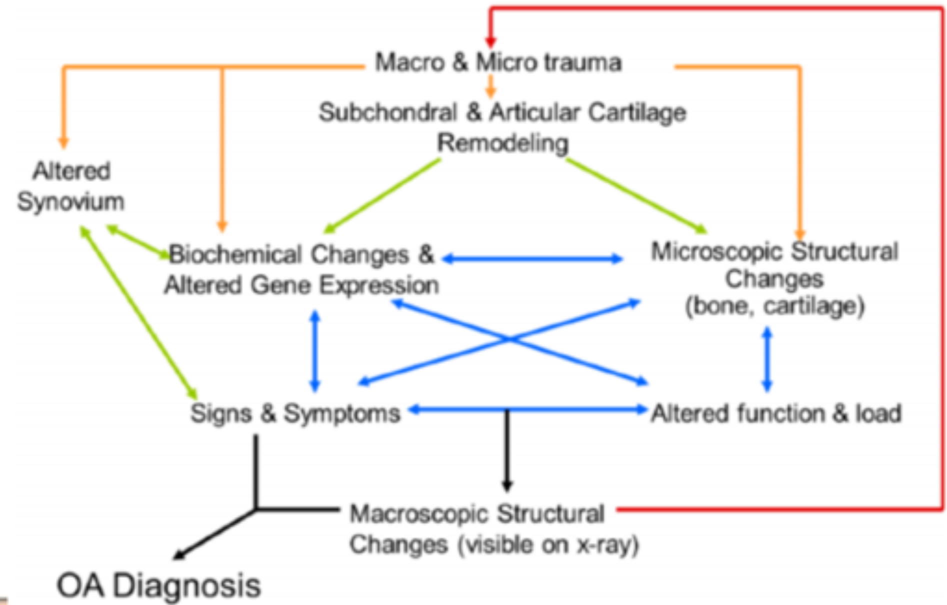
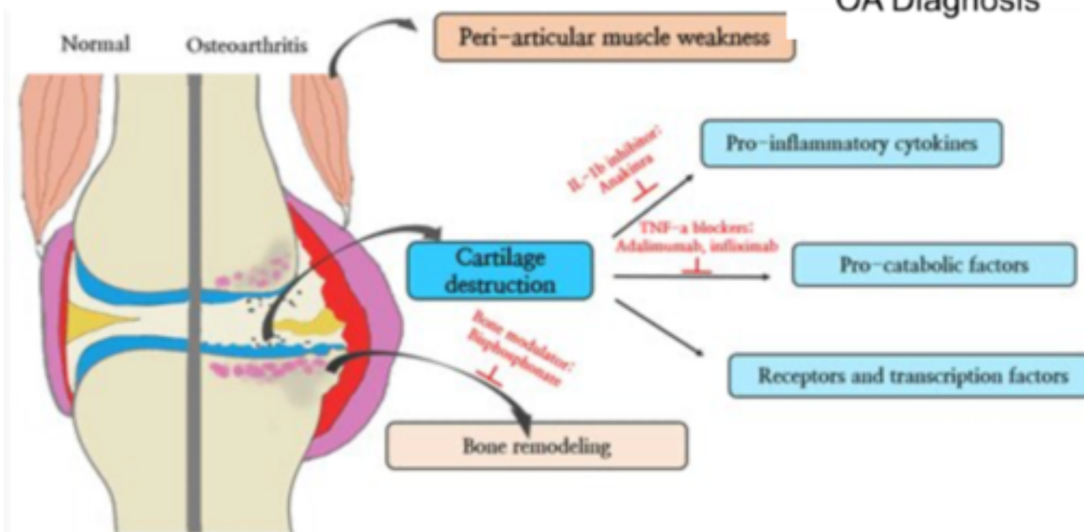
Pathophysiology of OA





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CASE #1

Management

- Conservative
  - analgesics
  - splints
  - hand therapy
    - warm wax
    - taping
- Surgical
  - fusion
  - joint replacement

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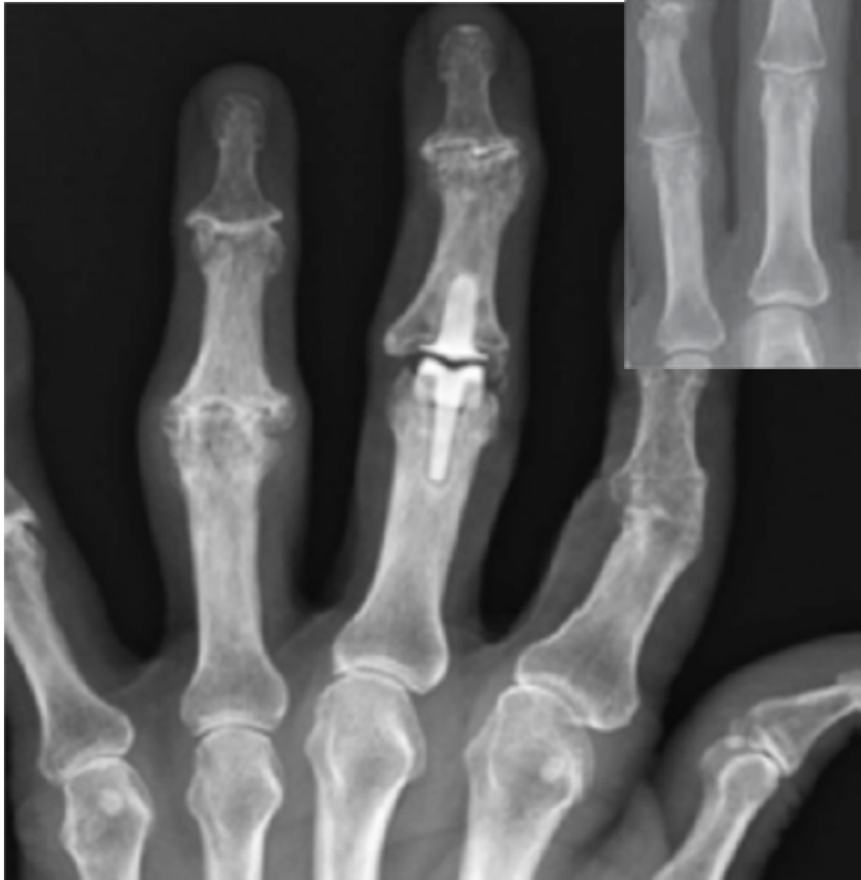

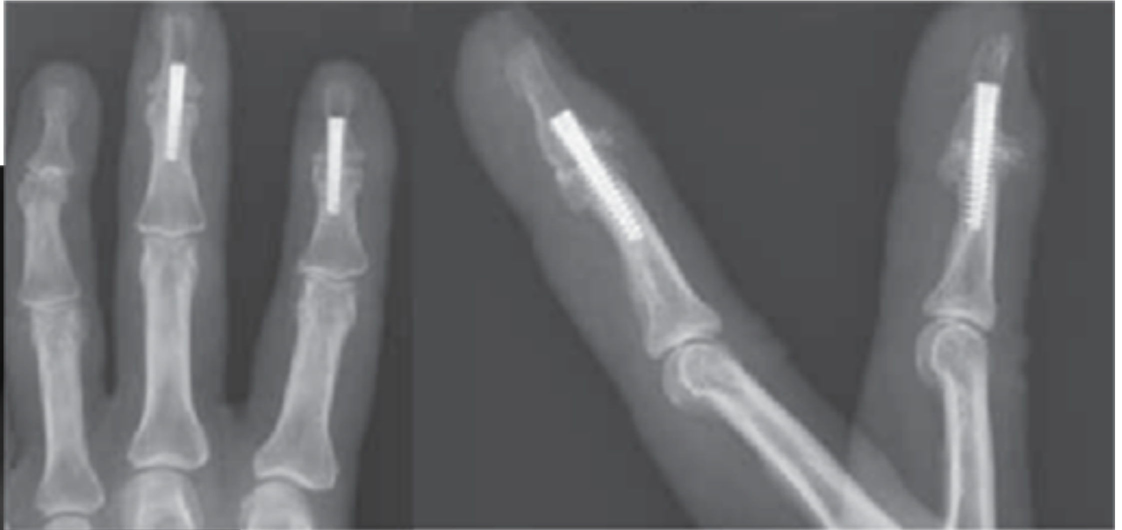

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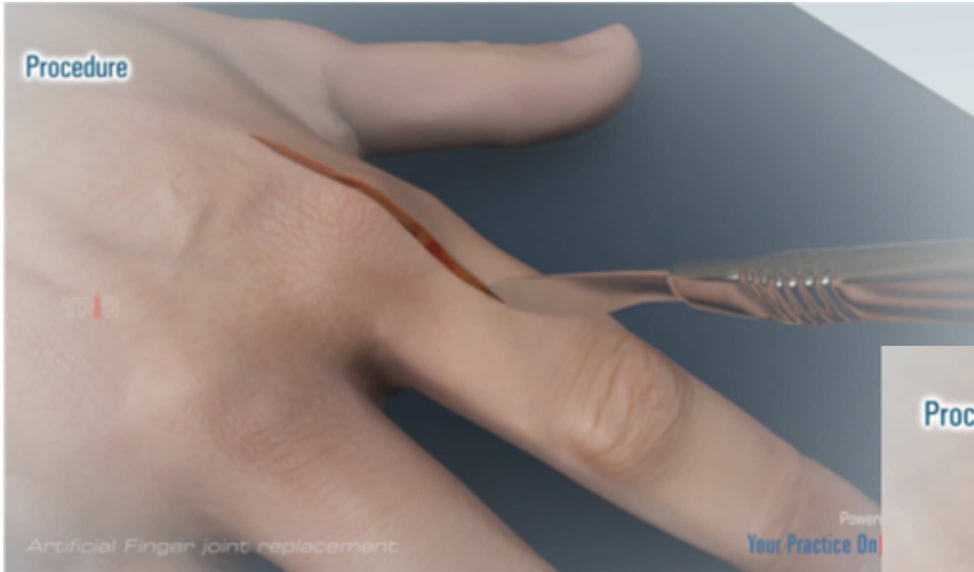

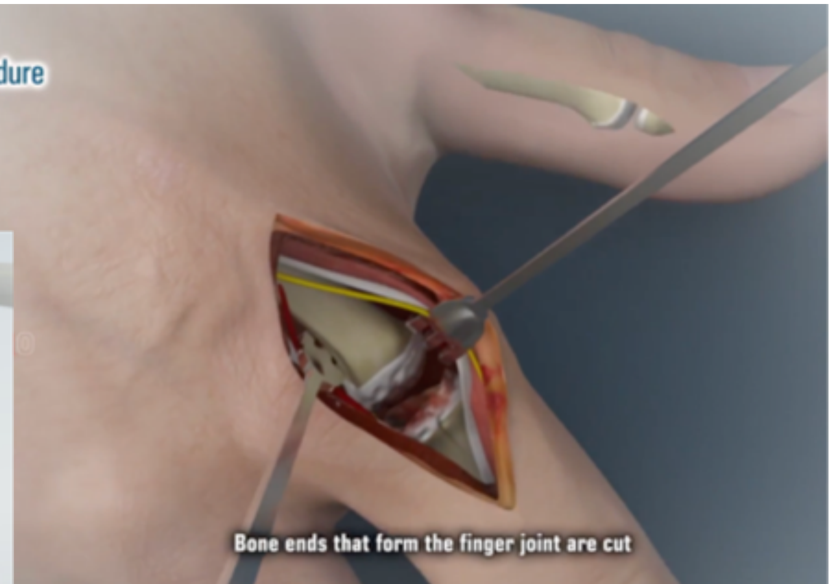

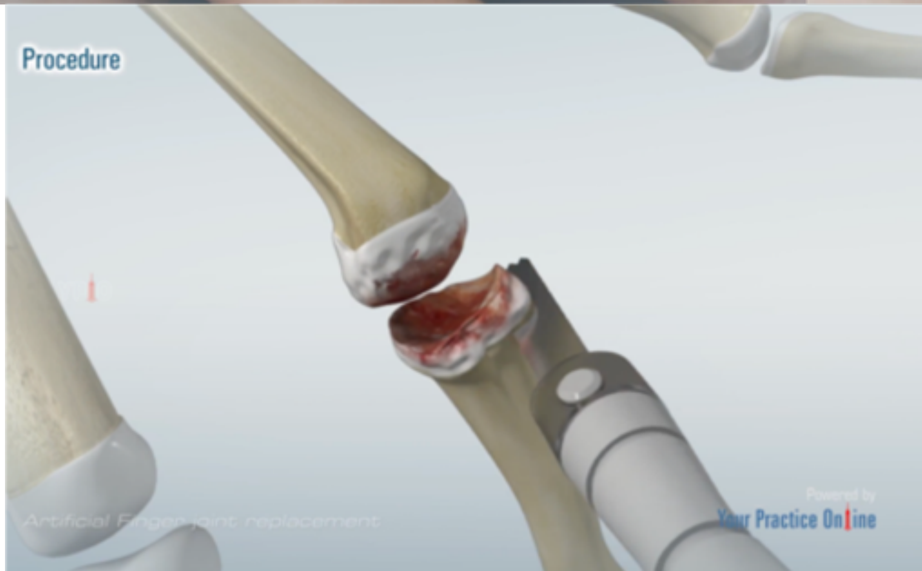

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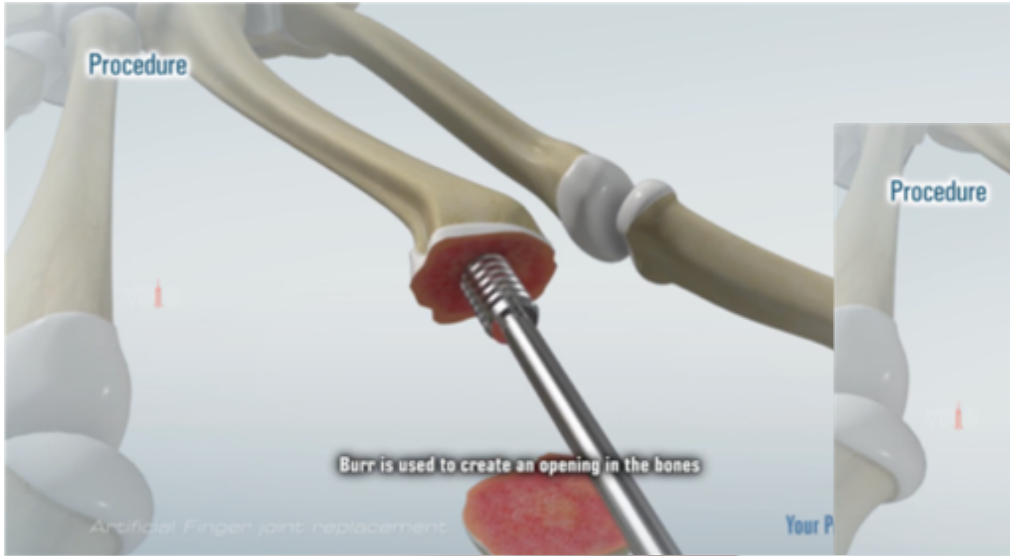

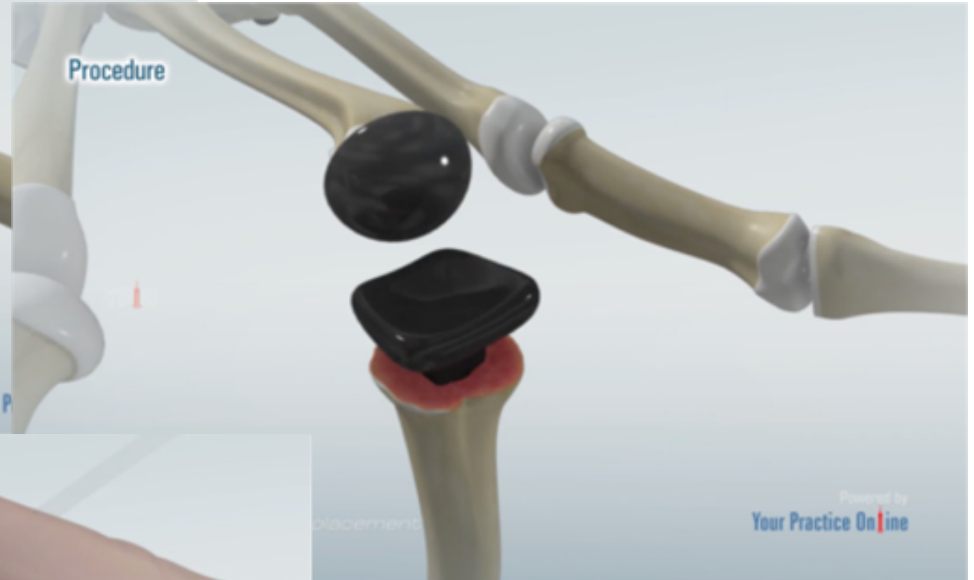

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CASE #2

38 year old male
Injury with garden shears
Finger pulp injury

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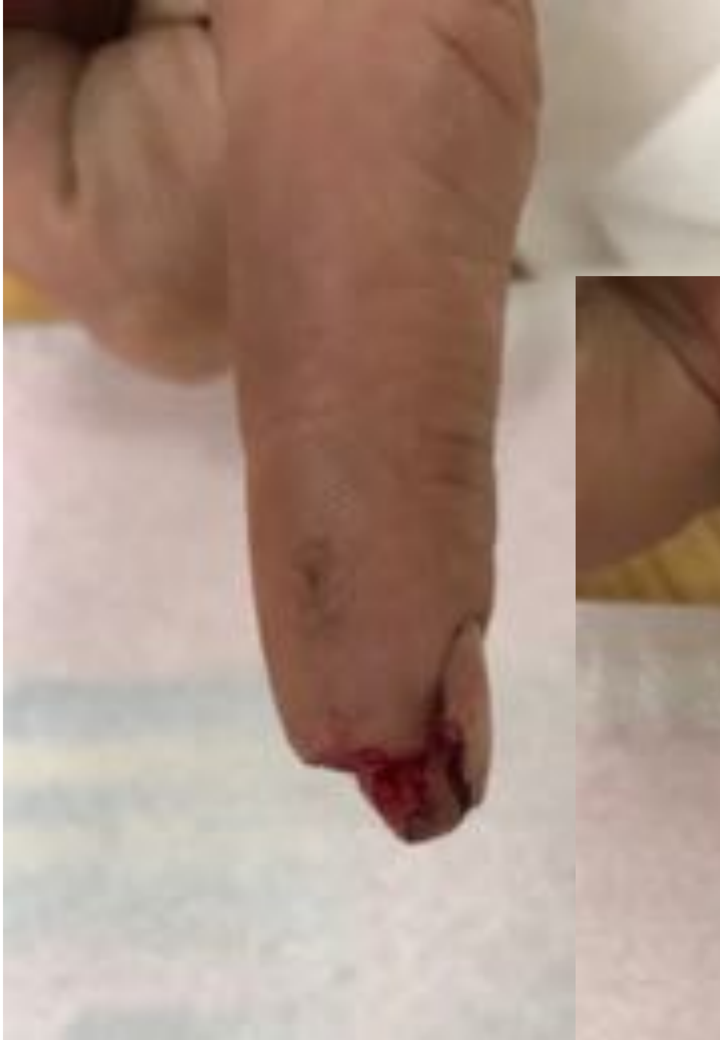
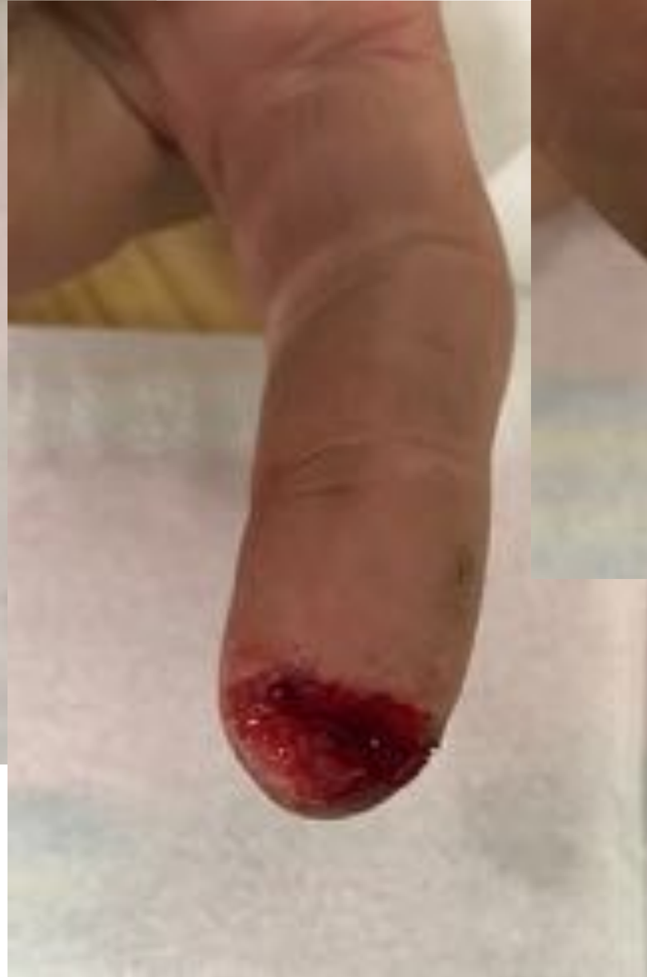
CASE #2





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CASE #2

First aid

Antibiotics

Tetanus status

Management

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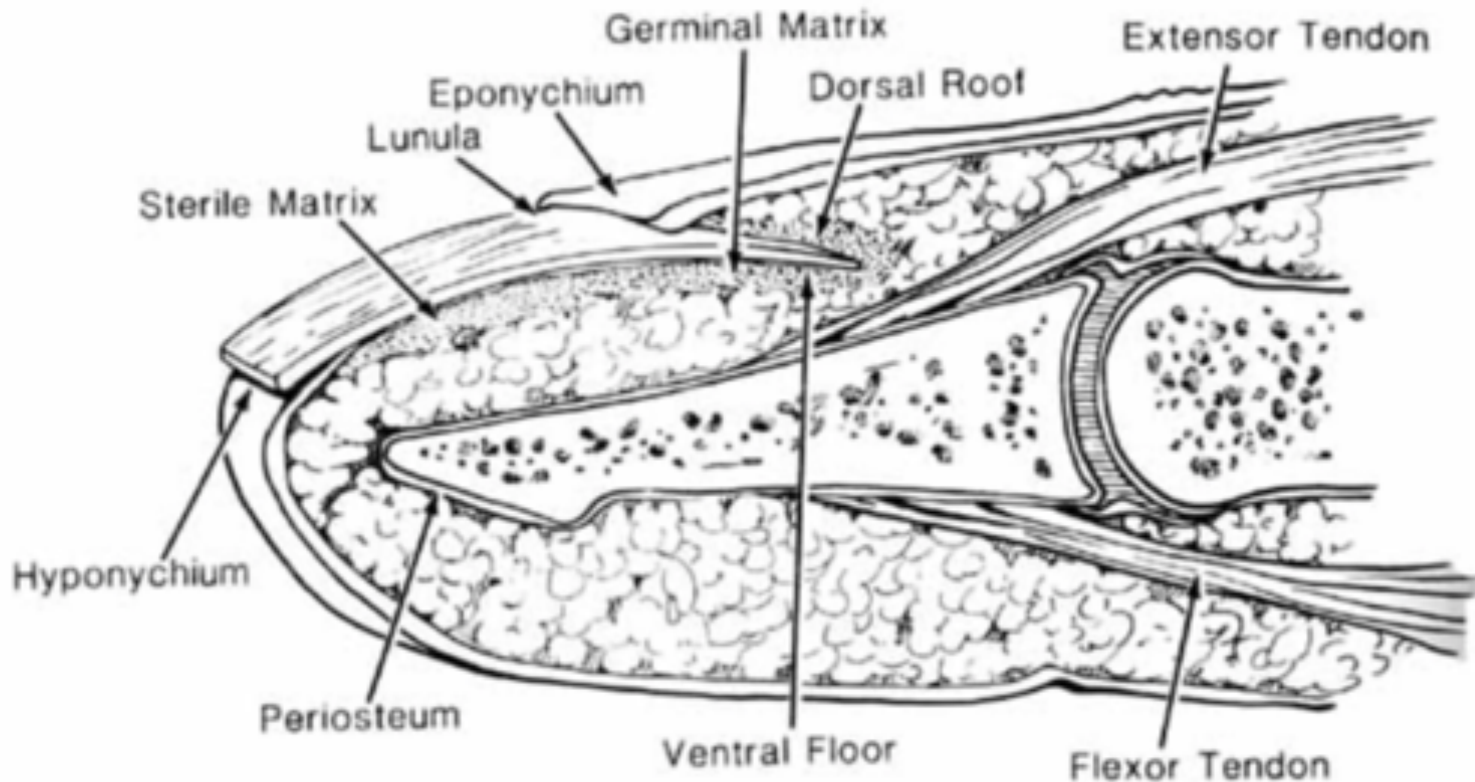
CASE #2



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CASE #2

Management

- Conservative (cling film)

- Surgical
  - VY advancement flap
  - Cross finger flap

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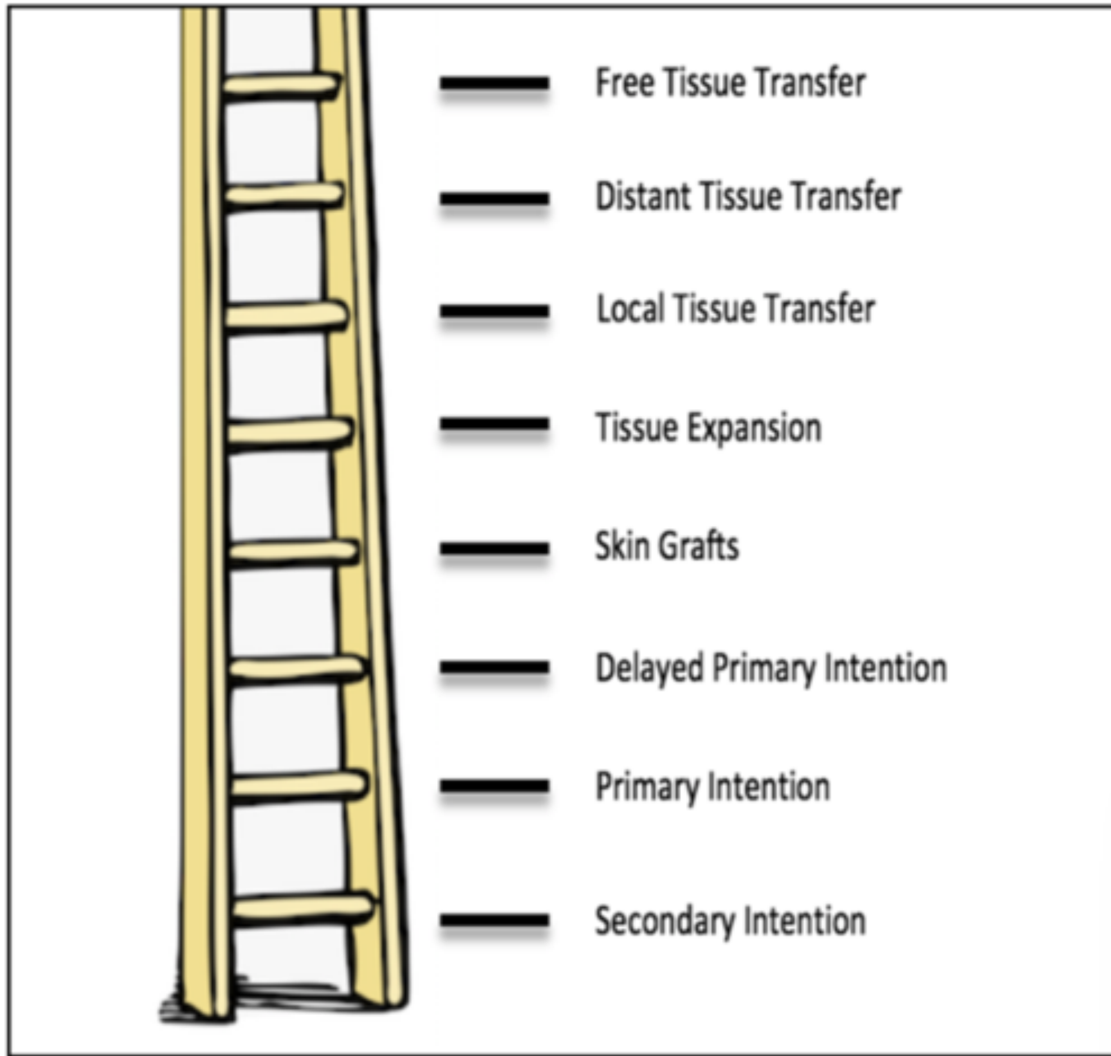
CASE #2



Reconstructive ladder

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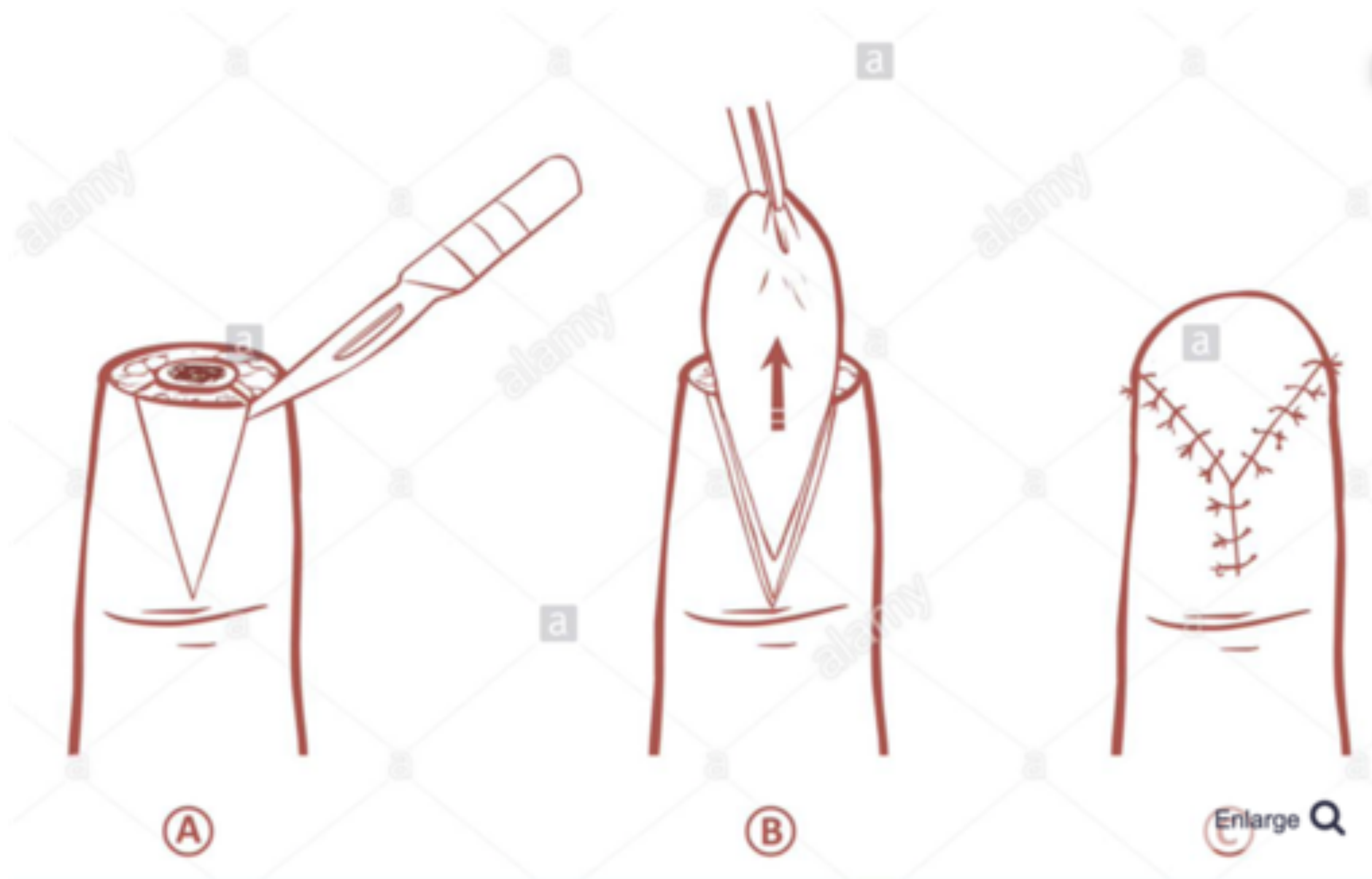
CASE #2

VY advancement flap



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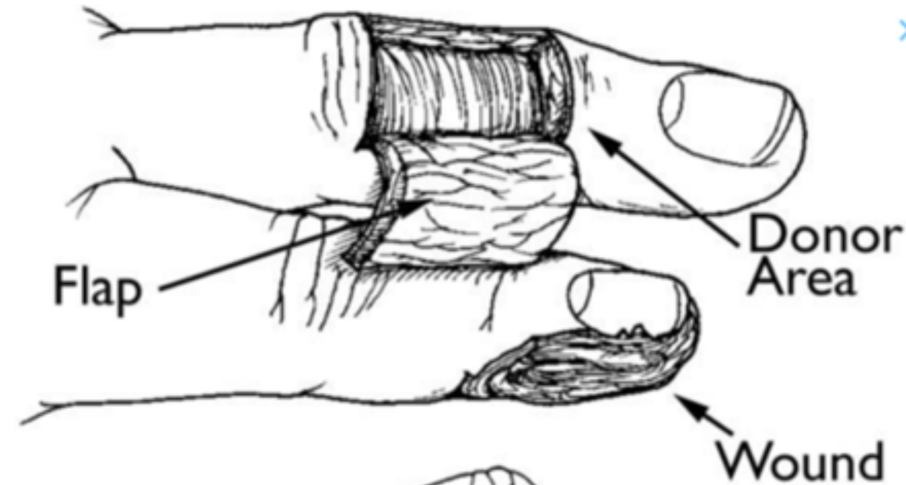

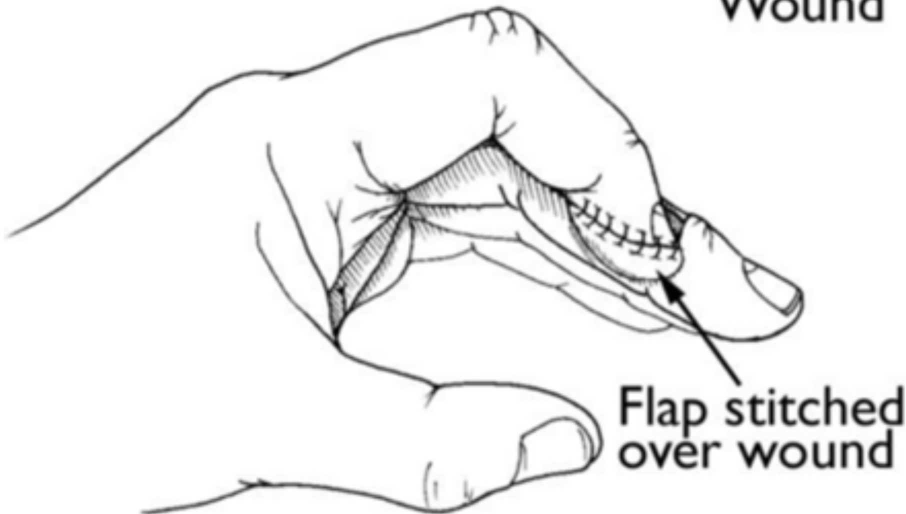

- Cross finger flap

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CASE #3

20 year old student
Fell playing netball 5 months ago
Subsequent fall 4 weeks ago
Ongoing pain and clicking in right wrist

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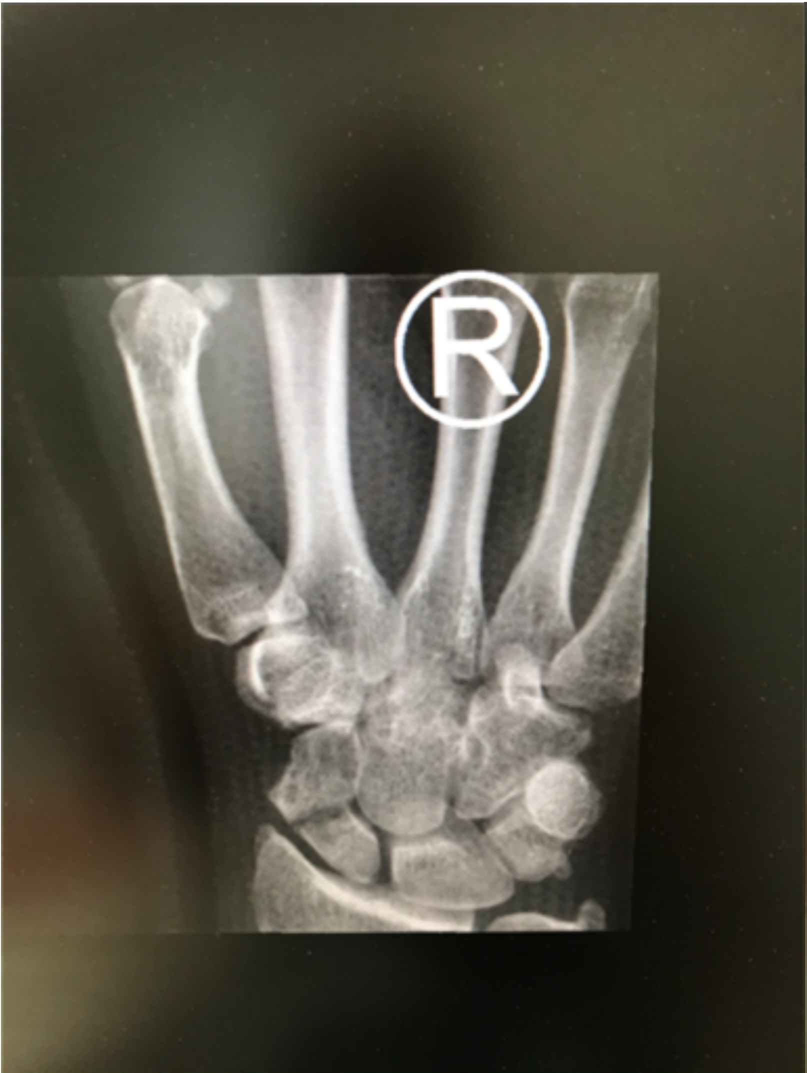
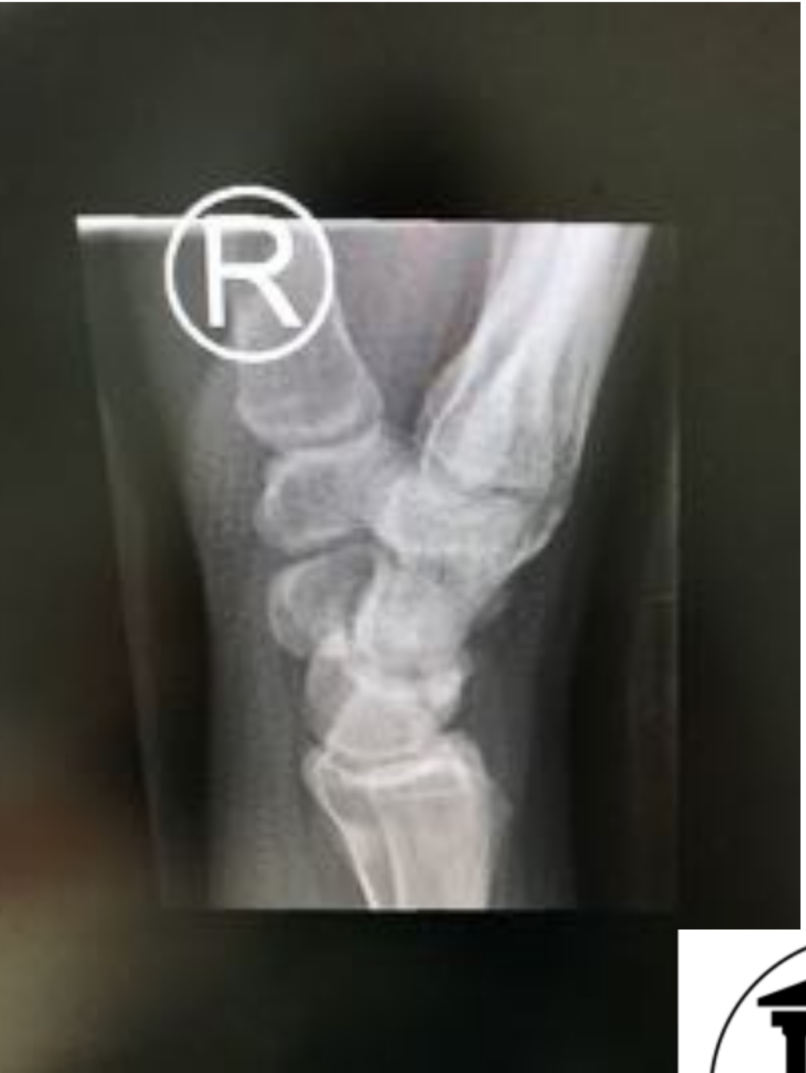
CASE #3





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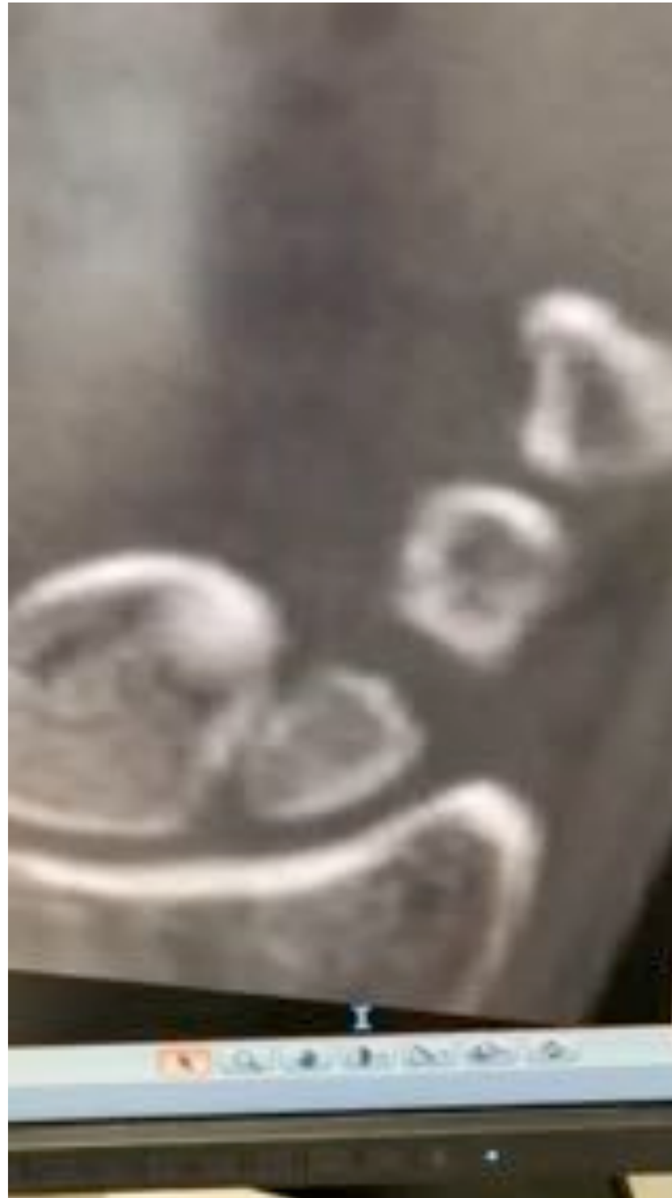

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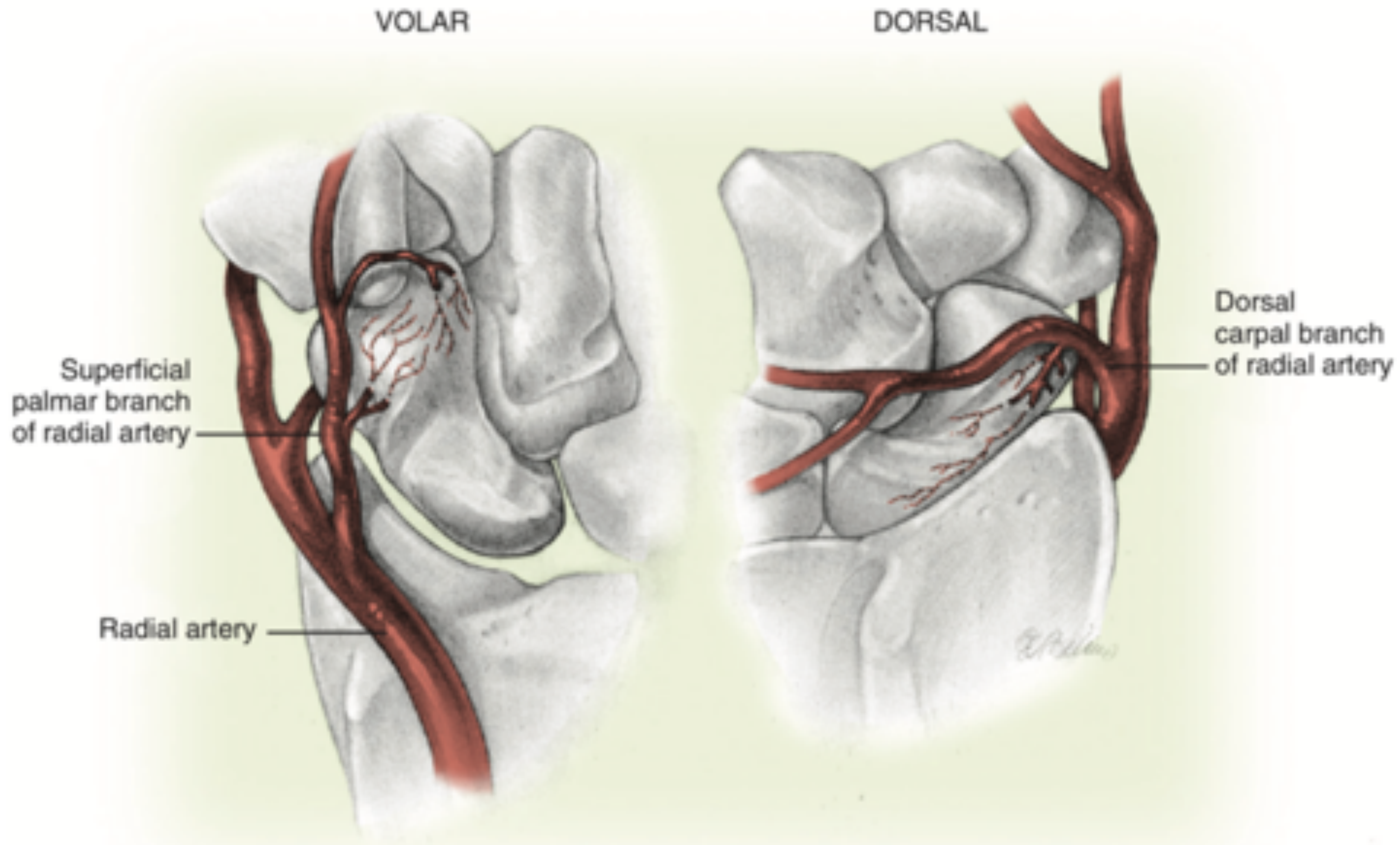

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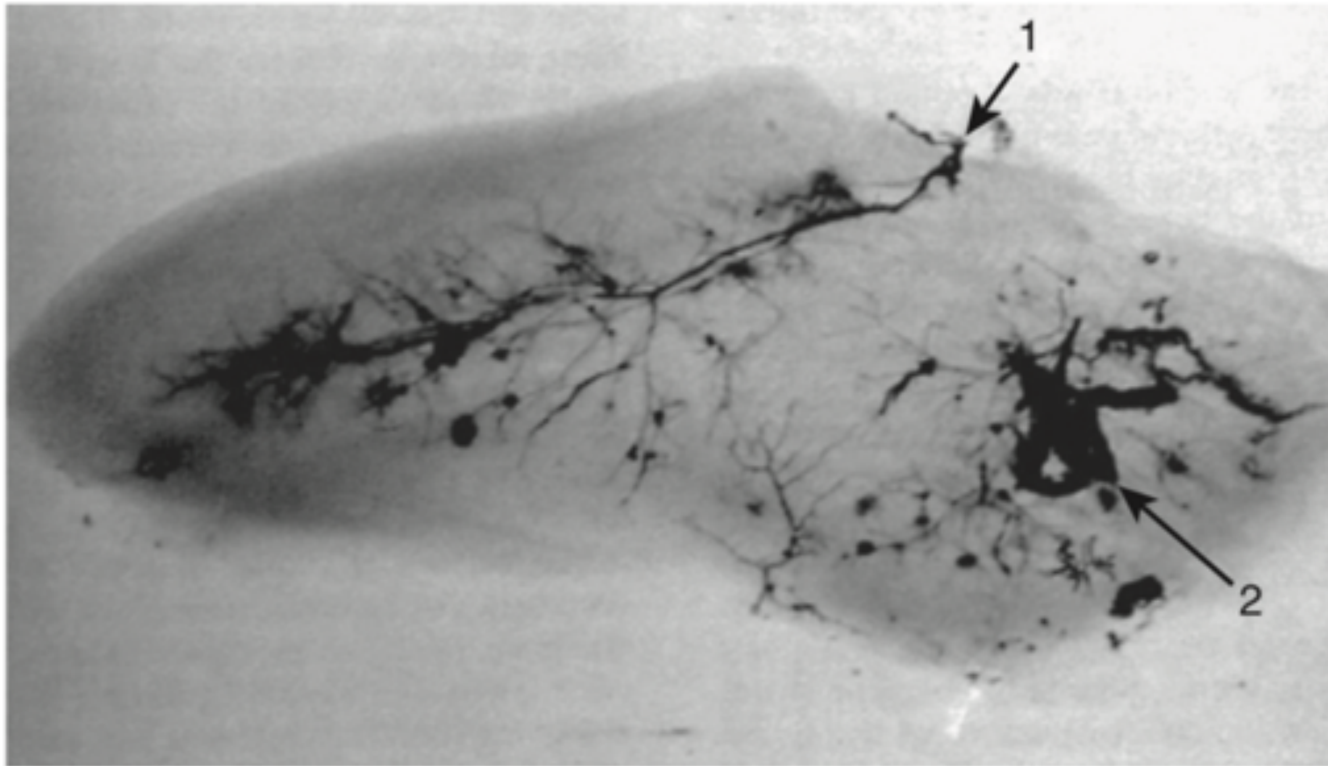
CASE #3

Gelbermann et al, J Hand Surg [Am] *5:508-513, 1980*
Studied the intraosseous anatomy using injection techniques



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CASE #3

Mayo

Distal articular surface

Distal tubercle

Distal third

Middle third

Proximal third

van Leerdam 20

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CASE #3

Russe

Figure 18.6 Classification of fractures of the scaphoid (Russe). HO, horizontal oblique; T, transverse; VO, vertical oblique. *(From Taleisnik J:* The Wrist, *New York, Churchill Livingstone, 1985. Redrawn by Elizabeth Martin.)*

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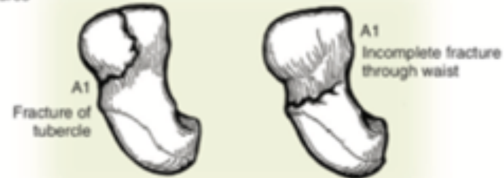
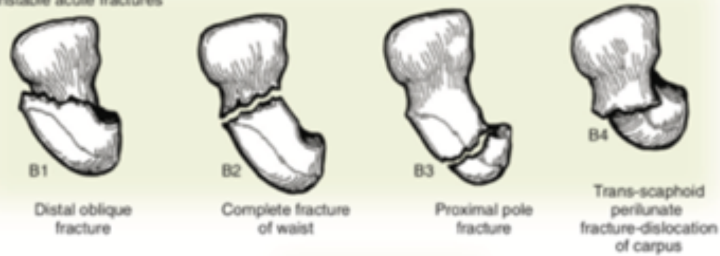
CASE #3

Herbert

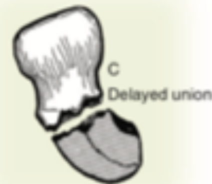
Type A:
Stable acute fractures



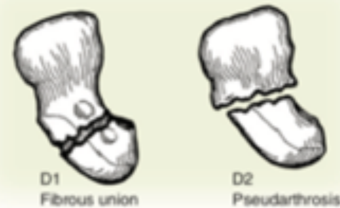
Type B:
Unstable acute fractures



Type C:
Delayed union



Type D:
Established nonunion



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CASE #3

Systematic review

- JHS Eur 2011 (Symes et al)
- Identified 8 studies comparing surgery vs conservative management of acute fractures
- No significant difference in
  - Pain, tenderness
  - Cost, functional outcome or patient satisfaction
- Plaster group
  - Above elbow no better than below elbow
  - Scaphoid cast no better than colles
- Surgical group
  - Non-union rate 3x lower (1.7% vs 10%)
  - Quicker return to function
  - Higher complication rate (CRPS, scar sensitivity, screw removal, STT arthritis)

CASE #3

Ongoing research

SWIFFT trial

- randomizing 400+ scaphoid fractures to either conservative or surgical management
- Primary outcome PRWE
- Secondary outcomes
  - Radiographic union
  - Quality of life
  - ROM and grip strength
  - Complications

Scaphoid Waist Internal Fixation for Fractures Trial (SWIFFT) protocol: a pragmatic multi-centre randomised controlled trial of cast treatment versus surgical fixation for the treatment of bi-cortical, minimally displaced fractures of the scaphoid waist in adults

Joseph Dias[1*], Stephen Brealey[2], Surabhi Choudhary[3], Liz Cook[2], Matthew Costa[4], Caroline Fairhurst[2], Catherine Hewitt[5], Stephen Hodgson[6], Laura Jefferson[2], Kanagaratnam Jeyapalan[7], Ada Keding[2], Paul Leighton[8], Amar Rangan[9], Gerry Richardson[10], Claire Rothery[10], Nicholas Taub[11], John Thompson[12] and David Torgerson[5]

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CASE #3

Approaches

- Volar approach
  - Incision made along radial border of thenar eminence and proximally along radial aspect of FCR tendon
  - Sheath of FCR is incised and FCR is retracted ulnarly to protect palmar cutaneous branch of median nerve
  - Longitudinal incision is then made in floor of FCR sheath to expose distal pole and waist of scaphoid
  - Fixation as before

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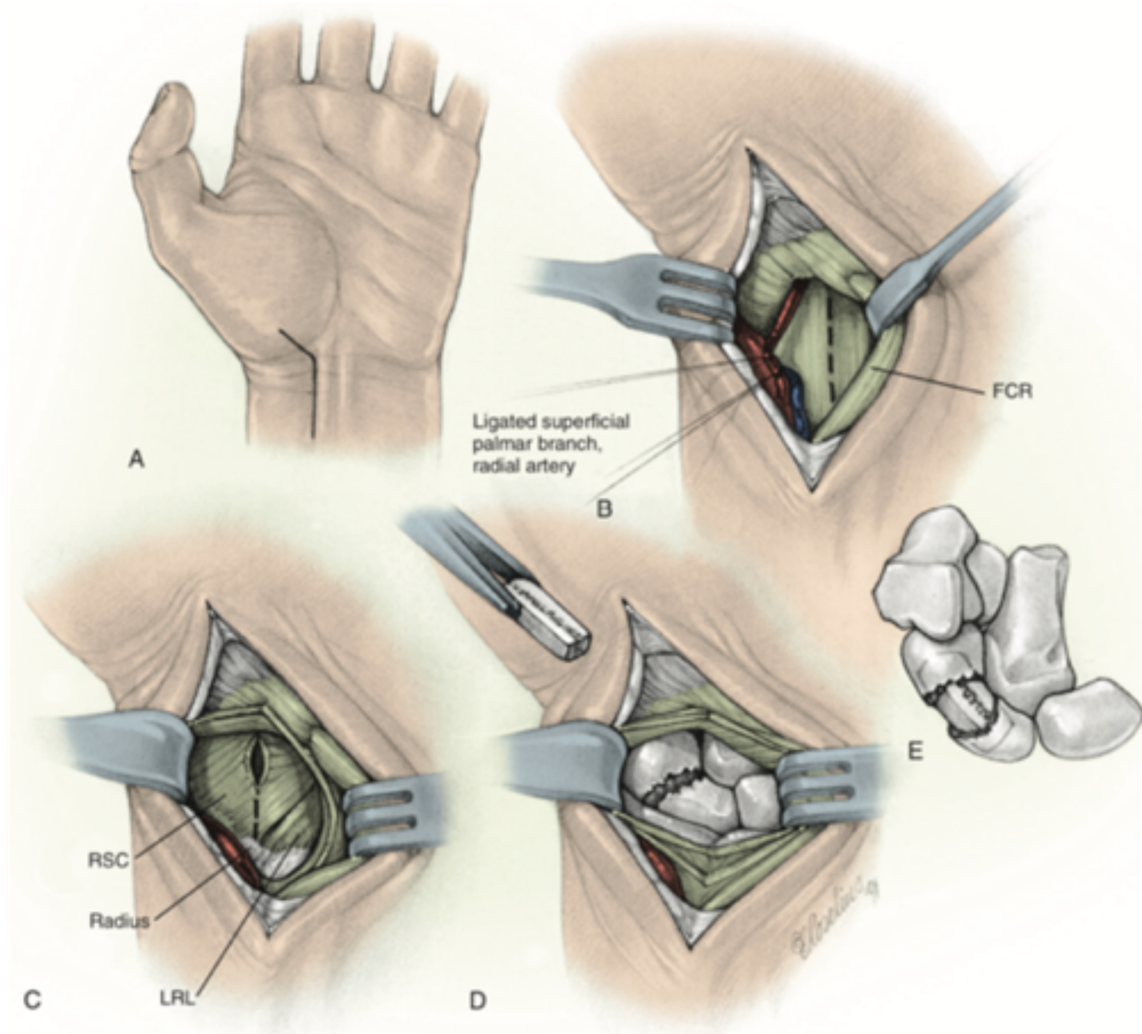

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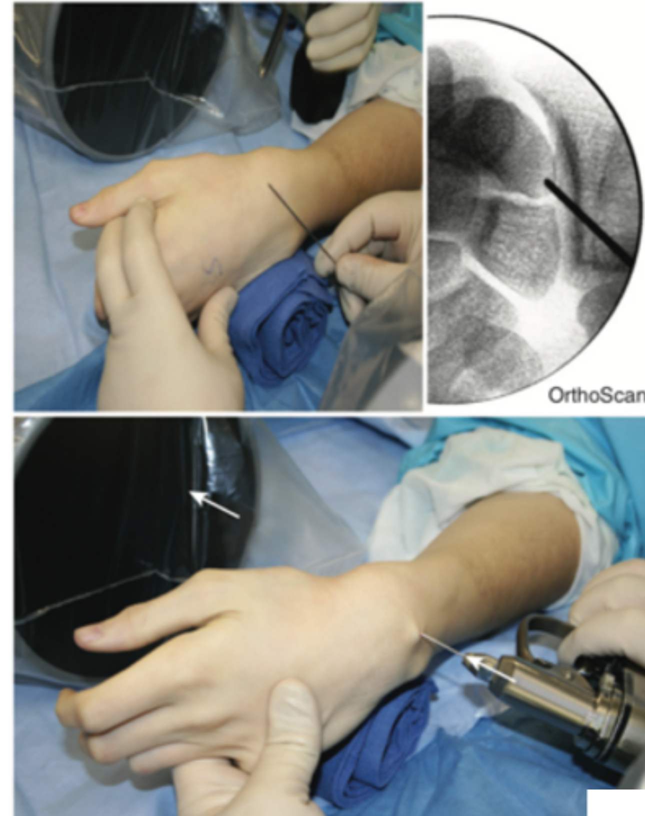
CASE #3

Approaches

- Dorsal approach
  - Incision between 3rd and 4th dorsal compartments over radiocarpal joint
  - EPL tendon released from its sheath and retracted radially
  - Longitudinal incision is then made in wrist capsule, exposing scapholunate joint
  - Reduce fracture if necessary and provisionally hold with k-wires
  - Insert headless compression screw



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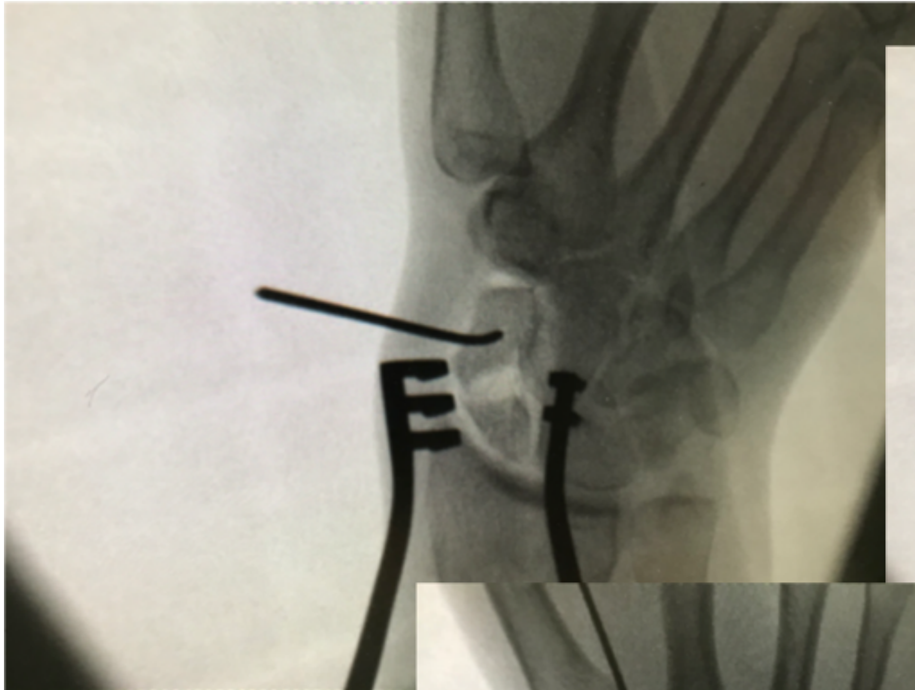

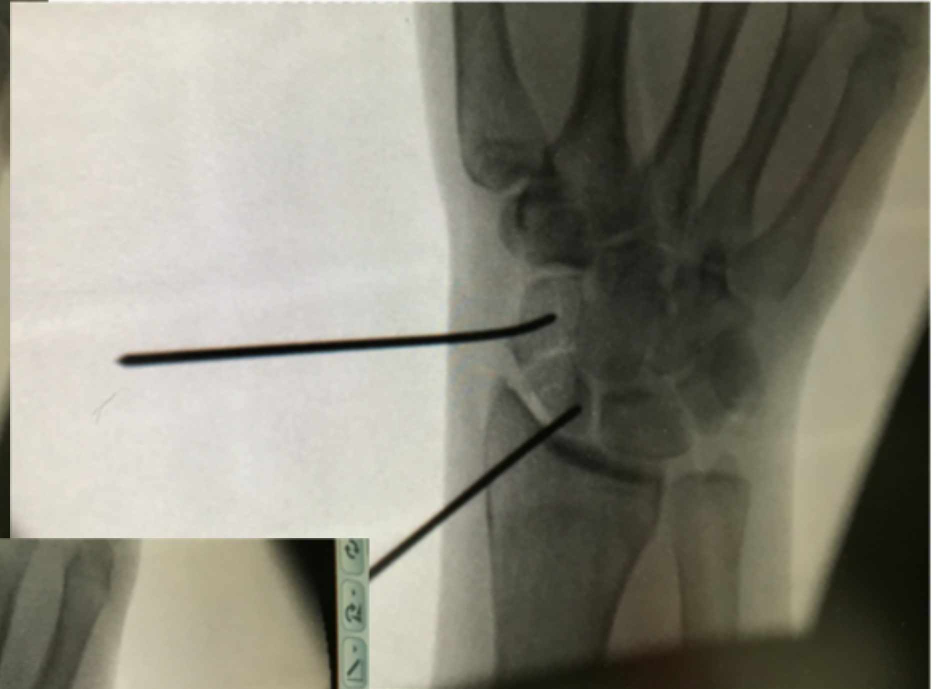

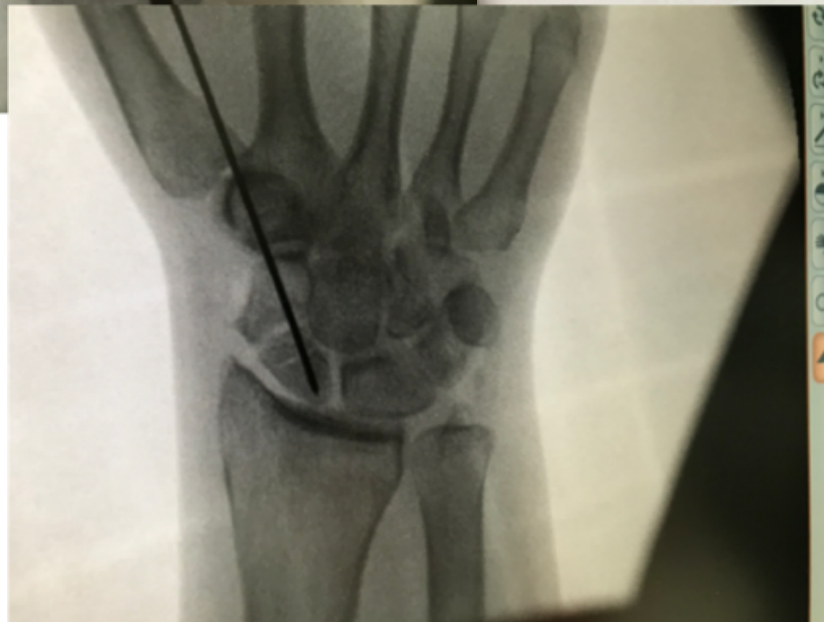

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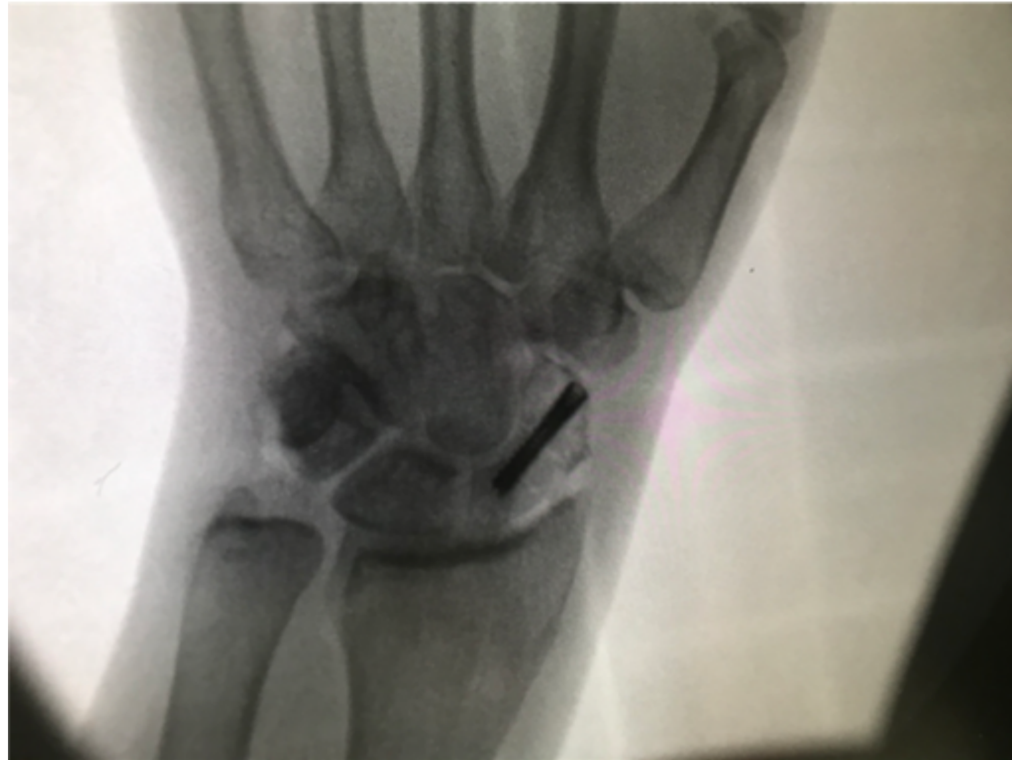

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CASE #3

My Management Algorithm

- Unsure if there is fracture
  - Get MRI scan
- Unsure of displacement
  - Get CT scan
- Treat in scaphoid cast for 6-12 weeks if stable / undisplaced fracture – image at 2, 6 and 12 weeks
- Fix fracture if
  - Displaced
  - proximal pole
  - clinically indicated (elite athlete, bilateral fractures, part of a more extensive carpal injury / dislocation etc…)

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ANY QUESTIONS ?

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