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Skeletal Trauma: Review of Commonly Encountered and Missed Fractures

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32-year-old male with shoulder pain after grabbing a rebound

Anterior shoulder dislocation

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ANTERIOR SHOULDER DISLOCATION

Frontal view Ideal frontal view (Neutral rotation) External rotation

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ANTERIOR SHOULDER DISLOCATION

a b

Neutral Internal rotation

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Vande Berg B, Omouri P. Dislocation of the Shoulder Joint - Radiographic Analysis of Osseous Abnormalities. *J Belg Soc Radiol.* 2016.

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ANTERIOR SHOULDER DISLOCATION

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ANTERIOR SHOULDER DISLOCATION

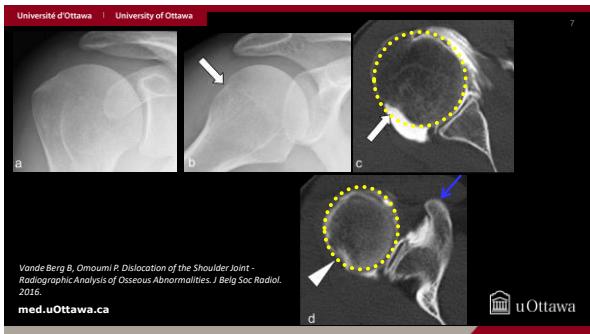
Prior dislocation

Posterosuperior impingement (baseball player)

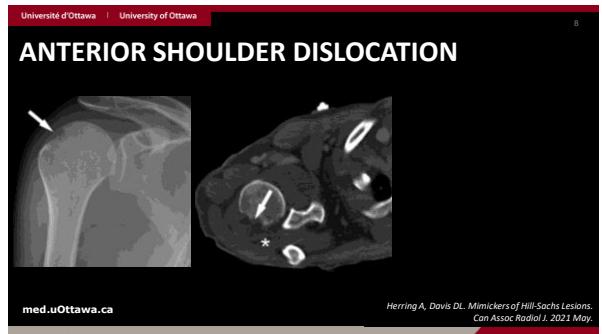
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Herring A, Davis DL. Mimickers of Hill-Sachs Lesions. *Can Assoc Radiol J.* 2021 May.

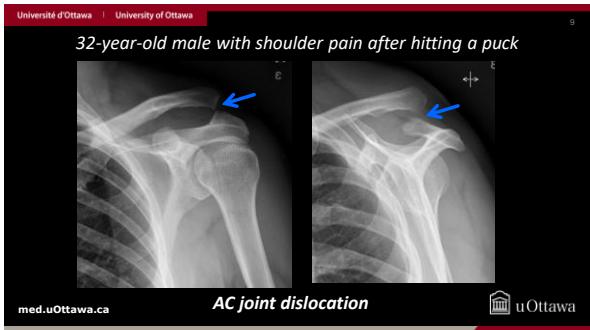
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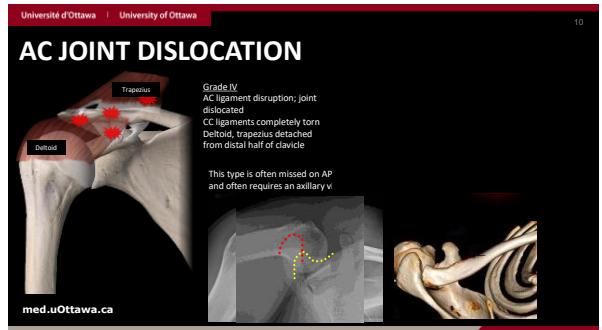
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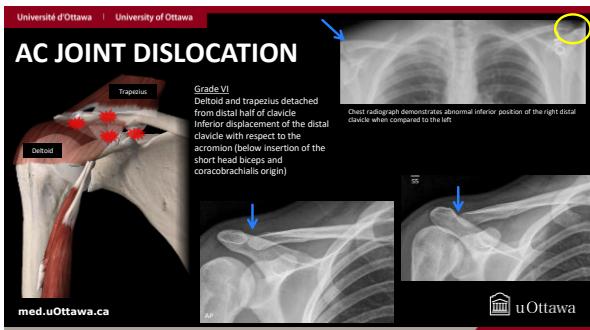
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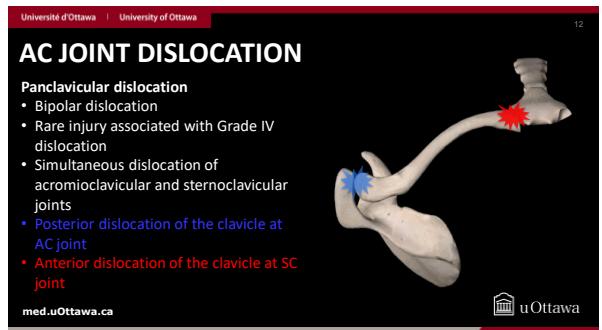
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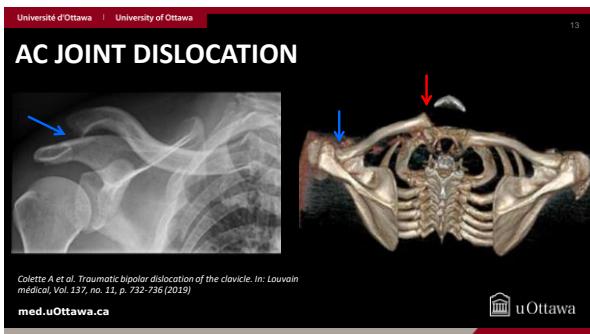
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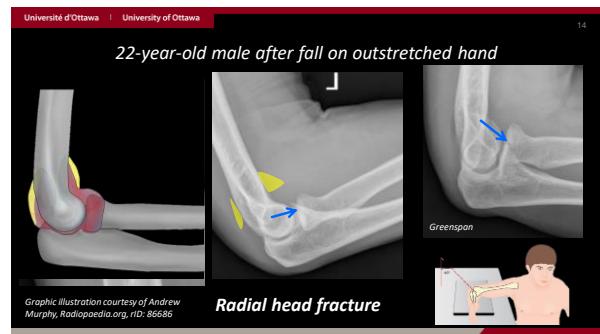
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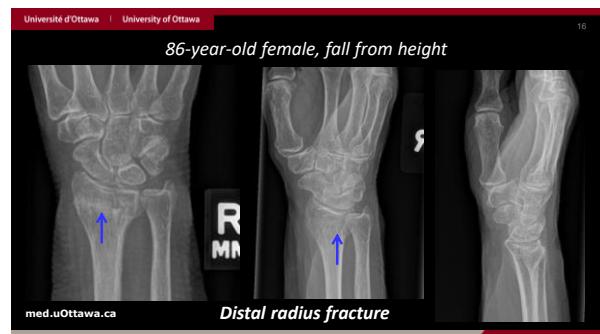
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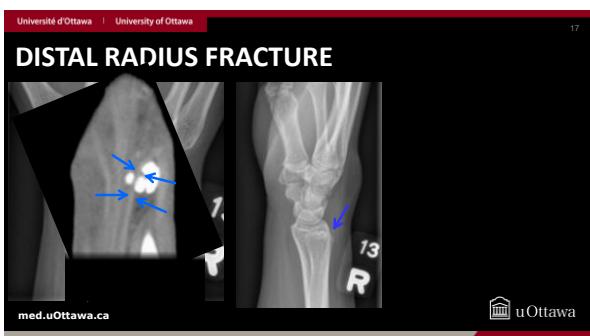
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SCAPHOID IMAGING



3-view radiographic examination

- PA
- Lateral
- 45 degree semipronated oblique

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SCAPHOID IMAGING



3-view radiographic examination

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- Lateral
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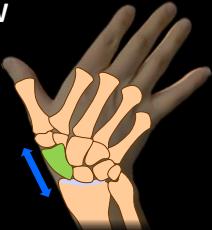
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SCAPHOID VIEW




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SCAPHOID VIEW



AP view

Oblique view

Scaphoid view

Scaphoid fracture

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Scaphoid view

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DISTAL POLE OF THE SCAPHOID



AP view

Oblique view

R

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SCAPHOID RIDGE



AP view

Oblique view

Scaphoid view

Scaphoid ridge

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Scaphoid view

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52-year-old female fell 3 weeks ago, fractured ankle, now has left wrist pain

Carpometacarpal dislocation

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CMC dislocation

- Less than 1% of all hand injuries
- Associated with hamate or metacarpal base fractures
- Usually after a fall, punching, or other high energy trauma
- Lisfranc-like injuries

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CMC dislocation

AP radiograph

- Parallelism
- Parallel M lines
- Symmetry
- No overlapping surfaces
- Distinct cortical rim

Fischer RL et al. Radiographics 1983.

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CMC dislocation

AP radiograph

- Parallelism
- Parallel M lines
- Symmetry
- No overlapping surfaces
- Distinct cortical rim

Fischer RL et al. Radiographics 1983.

An important pitfall is loss of profile and parallelism at the articular surfaces when the hand is not flat on the cassette.

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CMC dislocation

AP radiograph

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Fischer RL et al. Radiographics 1983.

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CMC dislocation

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Fischer RL et al. Radiographics 1983.

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CMC dislocation

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Fischer RL et al. Radiographics 1983.

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CMC dislocation

AP radiograph

- Parallelism
- Parallel M lines
- Symmetry
- No overlapping surfaces
- Distinct cortical rim

Fischer RL et al. Radiographics 1983.

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CMC dislocation

AP radiograph

- Parallelism
- Parallel M lines
- Symmetry
- No overlapping surfaces
- Distinct cortical rim

Fischer RL et al. Radiographics 1983.

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CMC dislocation

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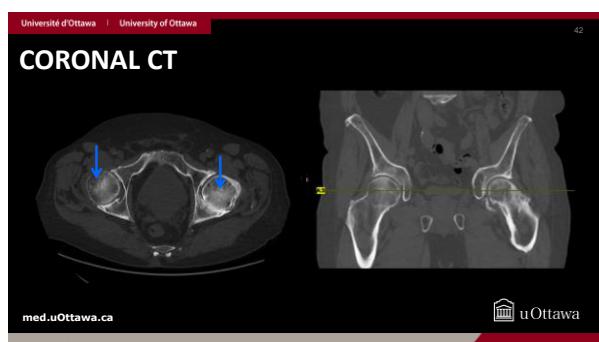
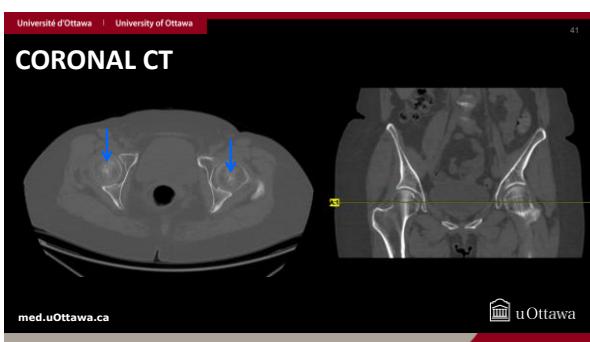
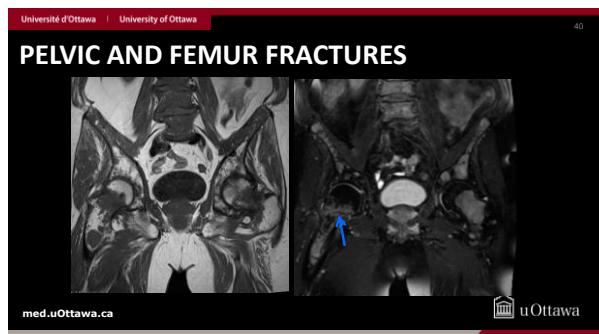
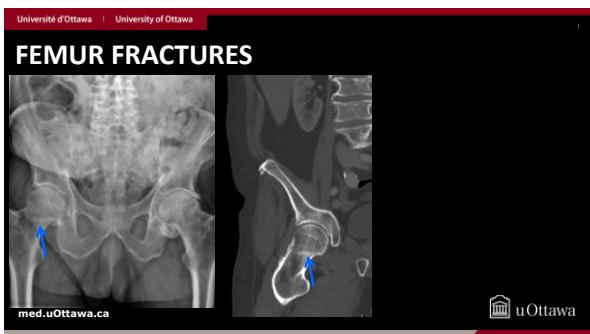
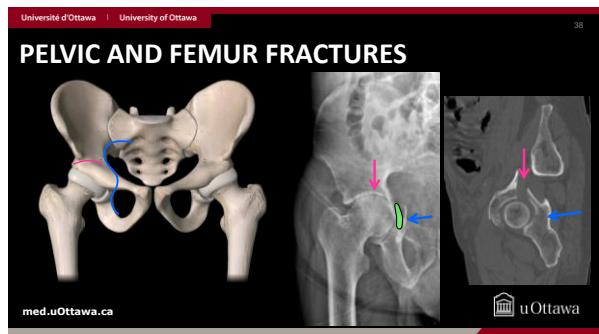
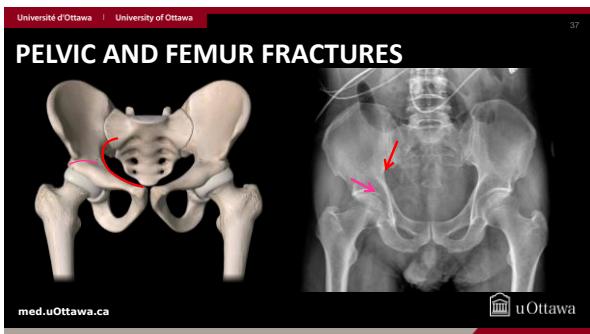
NORMAL PELVIS

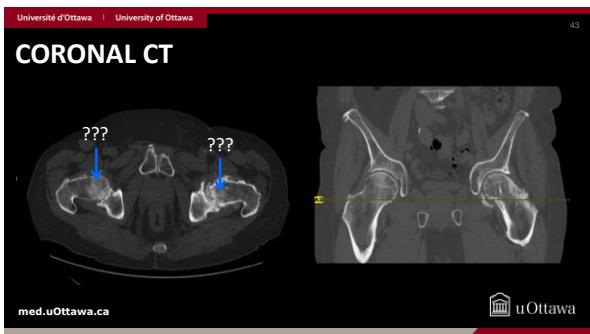
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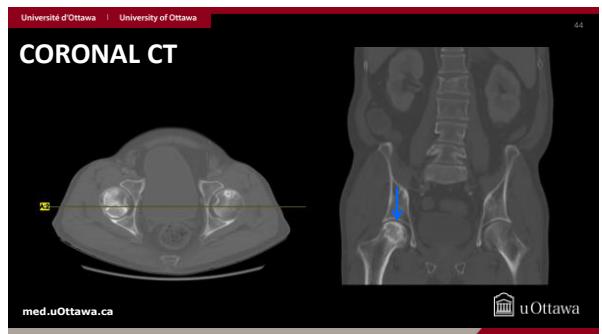
PELVIC AND FEMUR FRACTURES

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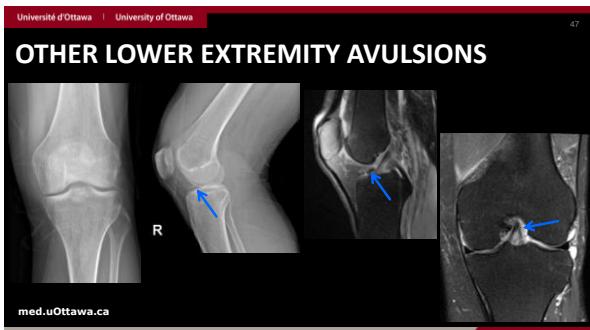
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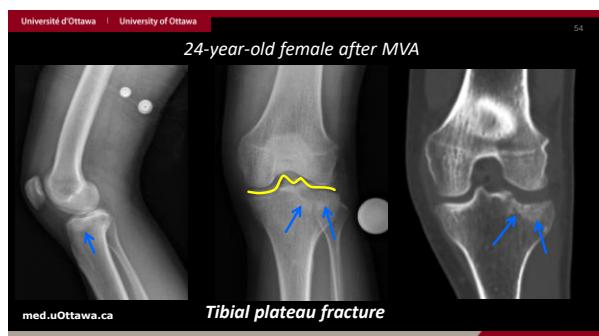
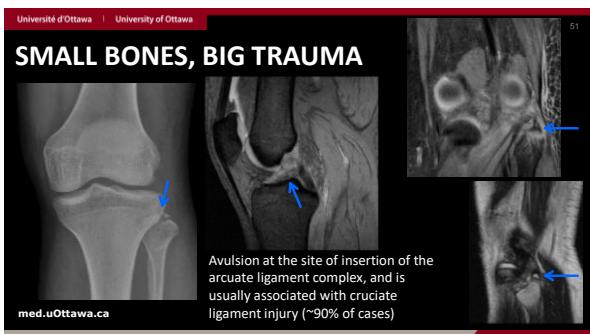
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TIBIAL PLATEAU FRACTURES

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TIBIAL PLATEAU FRACTURES

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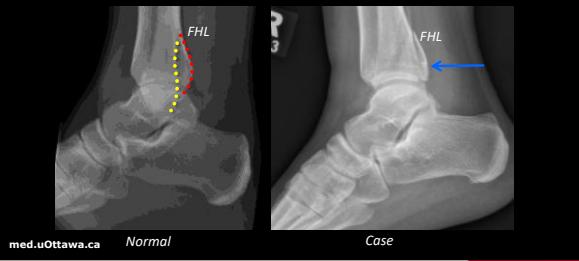
38-year-old female rock climber, fell from height

**Bimalleolar fracture**

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Mountain peak sign

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POSTERIOR MALLEOLAR FRACTURE

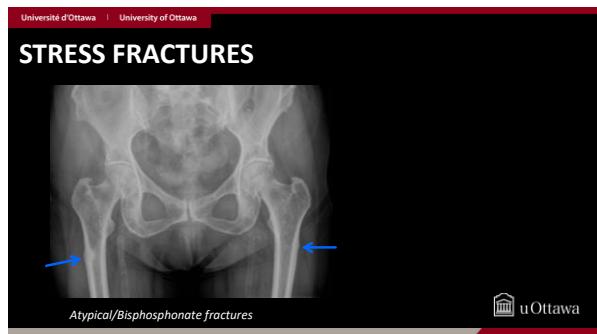
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POSTERIOR MALLEOLAR FRACTURE

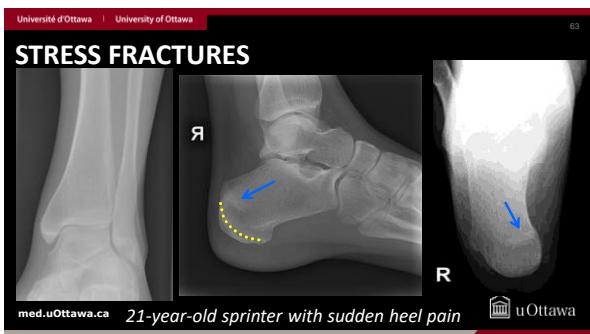
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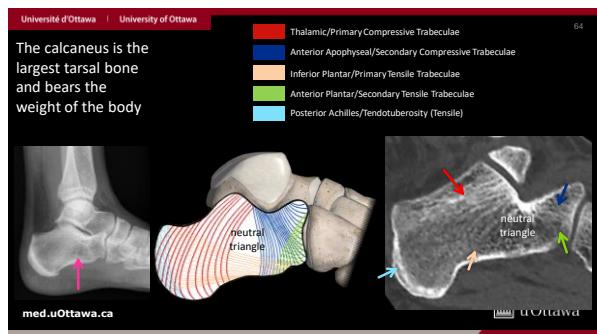
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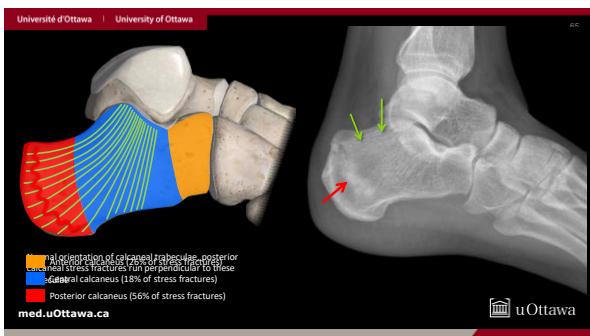
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