22M s/p fall onto shoulder while playing sports; mid clavicle tenderness

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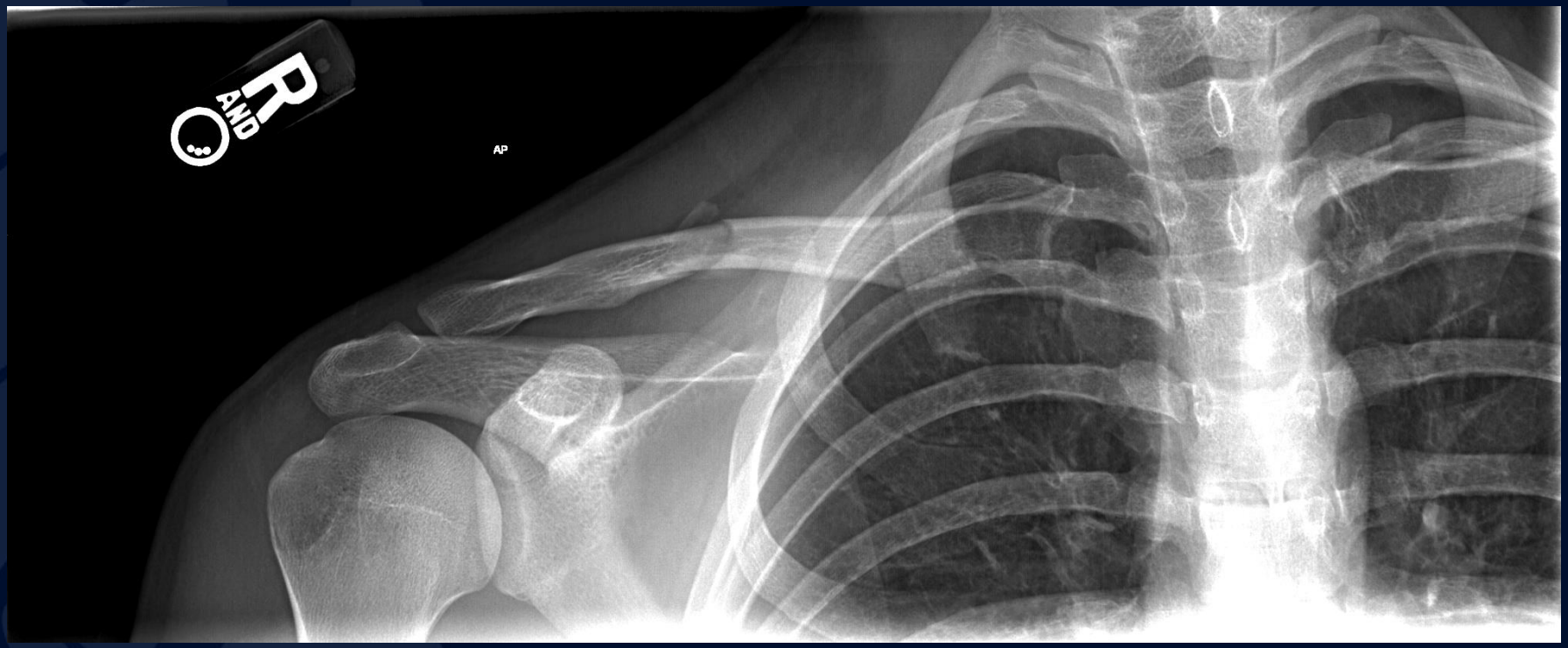

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Clavicle Fracture

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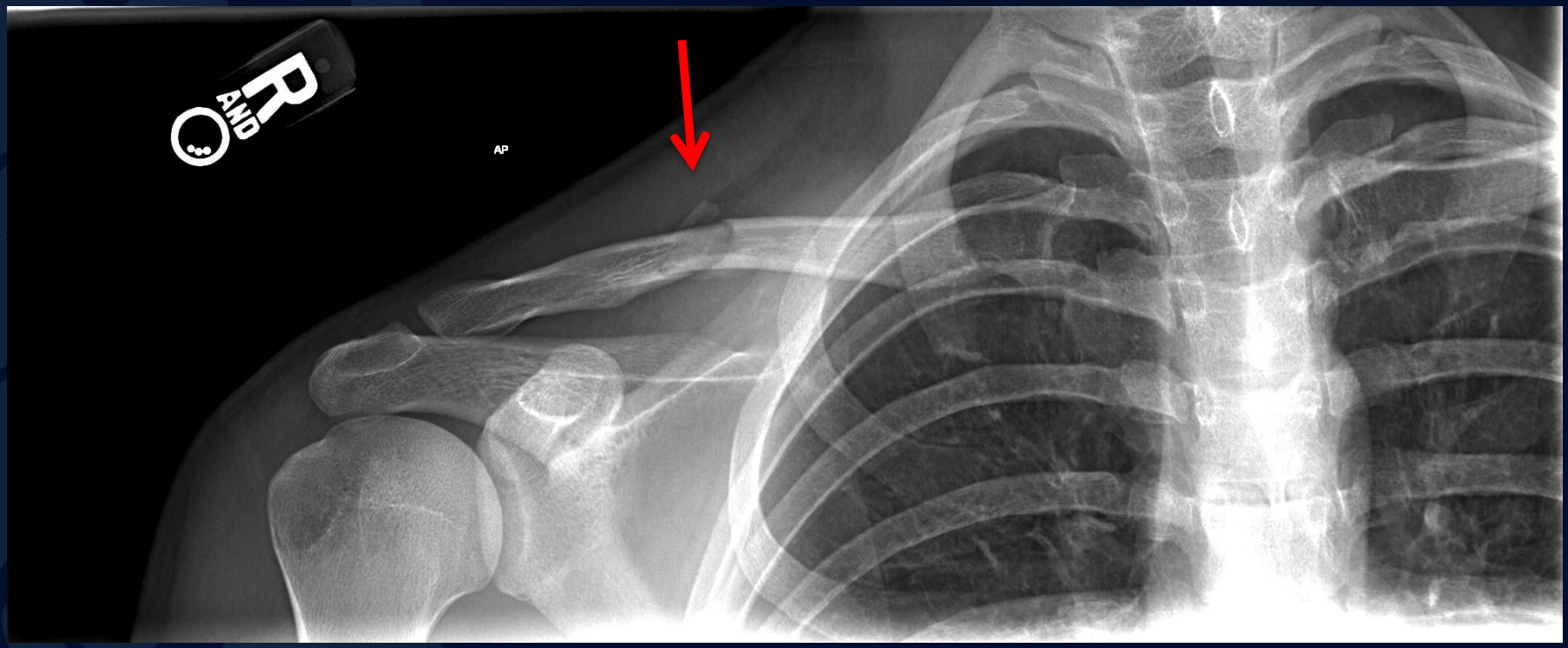

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Radiographic findings

- Allman Classification:
  - Group 1: Middle 1/3 (80%)
  - Group 2: Distal 1/3 (15%)
  - Group 3: Medial 1/3 (5%)
- Anterior/inferior displacement of lateral fragment
  - “nondisplaced” <1 shaft width
  - “displaced” >1 shaft width => 5% nonunion rate

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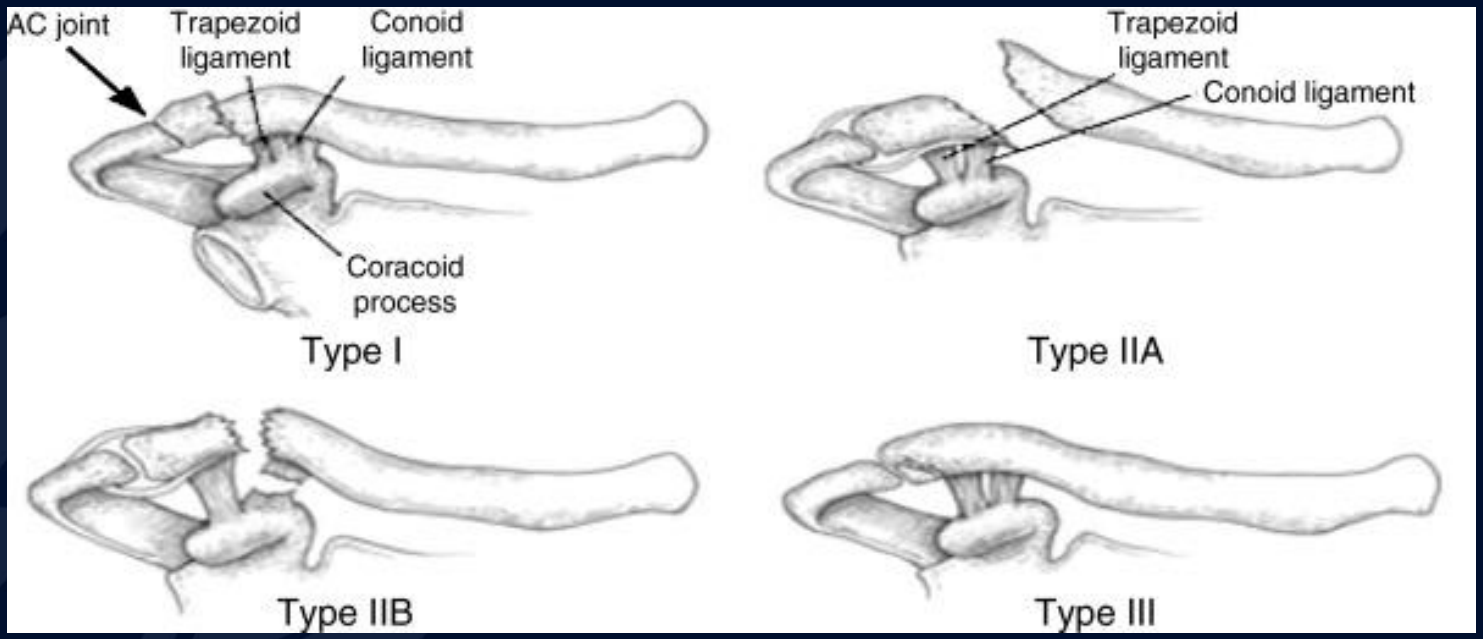
Neer Classification of distal clavicle fractures



Type I: b/w AC joint and CC ligament attachment

- Minimal displacement, intact ligaments

Type II: unstable medial clavicle

- IIA: Medial to CC ligaments
- IIB: Lateral to ruptured CC ligaments (or between torn conoid and intact trapezoid part of CC ligament)

Type III: at AC joint

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Clavicle Fracture

- Etiology: Direct fall onto shoulder (most common), direct blow to clavicle, or fall on outstretched hand; present with pain, swelling, palpable deformity.
- Associated abnormalities:
  - Rib fractures
  - Pneumothorax/hemothorax
  - AC or sternoclavicular disruption
  - Subclavian vessel or brachial plexus injury
- 5% of all fractures
- 50% in children <10yo
- M>F

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Clavicle Fracture

- Rx: Immobilization; ORIF for painful nonunion/cosmetic deformity
- Complications:
  - Neurovascular sx from brachial plexus or subclavian vessel compression
  - Malunion => shortening => ugly
  - Posttraumatic OA in distal clavicle fracture

References

1. Statdx
2. Radiopaedia
3. http://www.sciencedirect.com/science/article/pii/S2255497117300666

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