


# Gamekeeper's Thumb

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Syllabus PDF

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## Disclosures

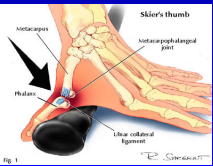
- Consultant: Bioclinica
- Book Royalties: Elsevier
- Not relevant to this lecture

See [www.jacobsonmskus.com](http://www.jacobsonmskus.com) for syllabus other educational material


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## Gamekeeper's or Skier's Thumb

- Injury: ulnar collateral ligament of first MCP joint
- Chronic (gamekeeper's thumb): historically in Scottish gamekeepers
- Acute (skier's thumb): acute hyperabduction



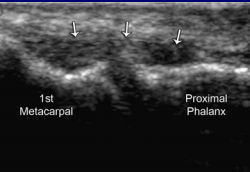
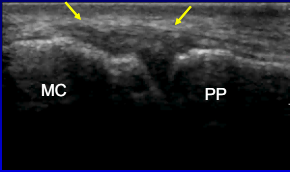
Acute Mechanism



Chronic Mechanism

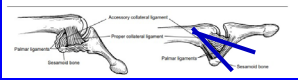
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## Ulnar Collateral Ligament: thumb






1st Metacarpal      Proximal Phalanx      MC      PP

Note: sliding of adductor aponeurosis with isolated interphalangeal joint flexion



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## Ulnar Collateral Ligament: thumb


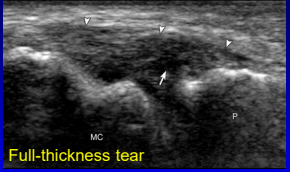
1      2      3      4      5

Normal      Sprain      Partial Tear      Nondisplaced Complete Tear      Displaced Complete Tear (Stener Lesion) (+ fracture)


RadioGraphics 2006;26:1007

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## UCL: tears

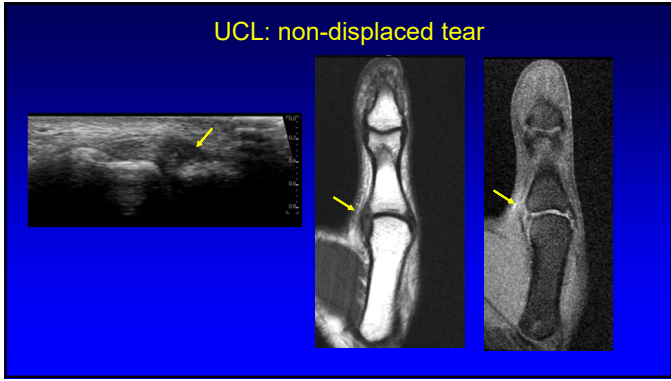
Partial-thickness tear      Full-thickness tear



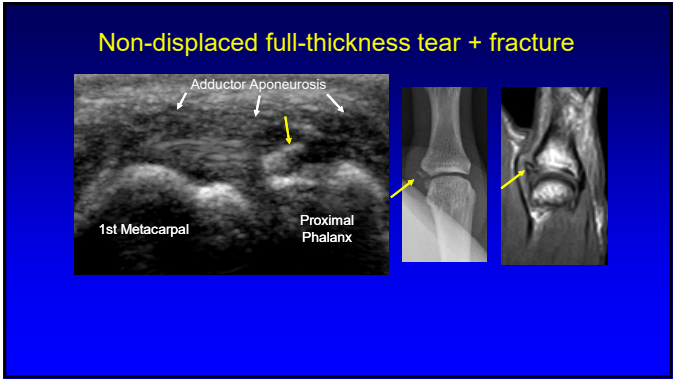
Normal

Teaching Point:  
90% of UCL injuries are distal

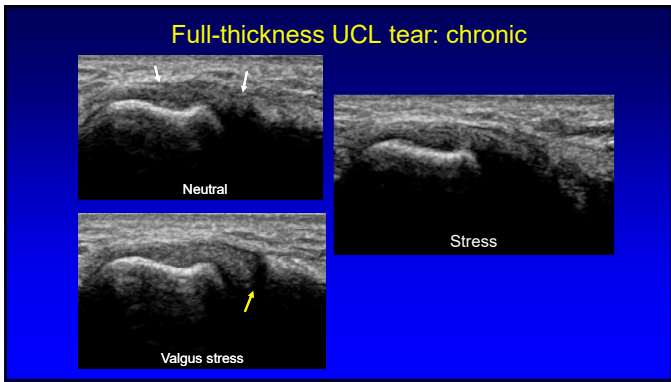
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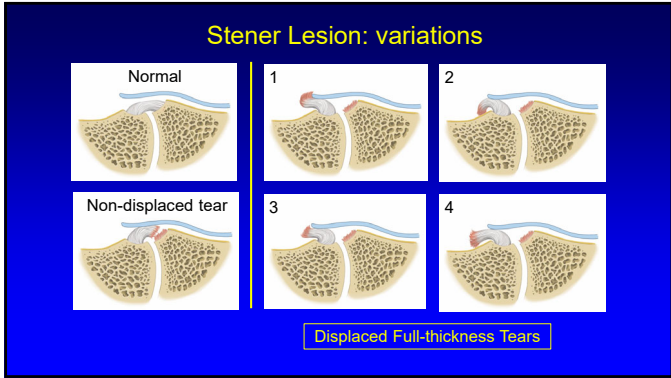
### Stener Lesion

- Displaced proximal stump of UCL
  - Hypoechoic & round
  - Proximal to MCP joint
  - At proximal edge of adductor pollicis aponeurosis
- No tissue spanning MCP joint
- "Yo-yo on a string" sign
- Ultrasound: 100% accuracy

**Yellow arrows: Stener**  
**White arrows: aponeurosis**

\*Melville D. et al. Skeletal Radiology 2013; 42:667

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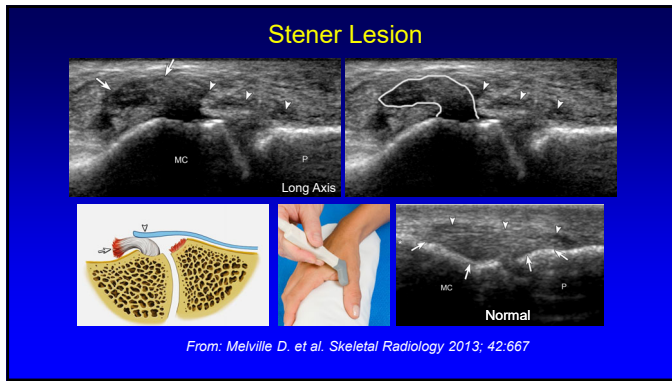
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### Stener Lesion: dynamic

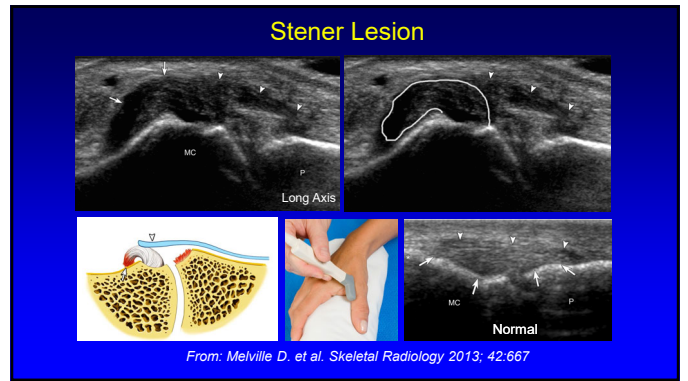
**White arrows = adductor aponeurosis**  
**Yellow arrows = Stener lesion**

**Teaching Point:**  
Note importance of active IP joint flexion at imaging showing aponeurosis

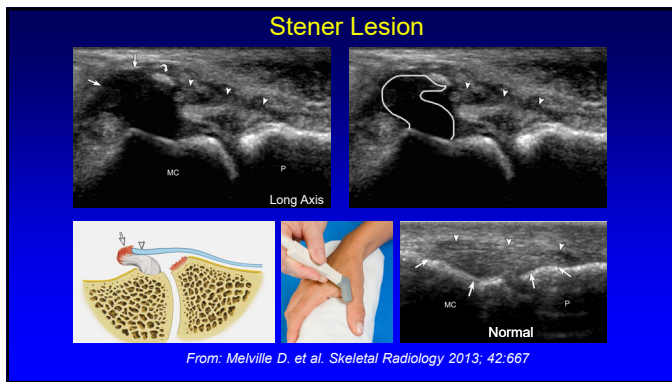
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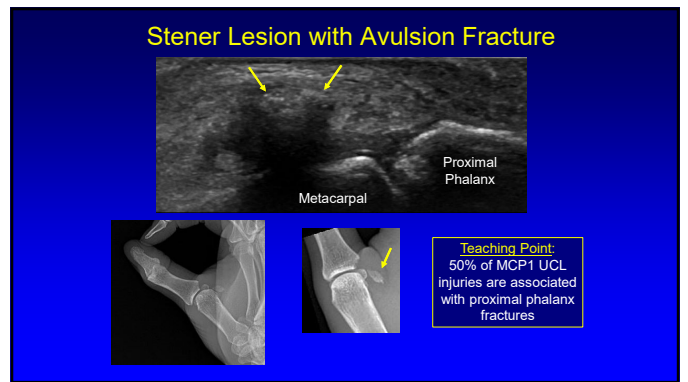
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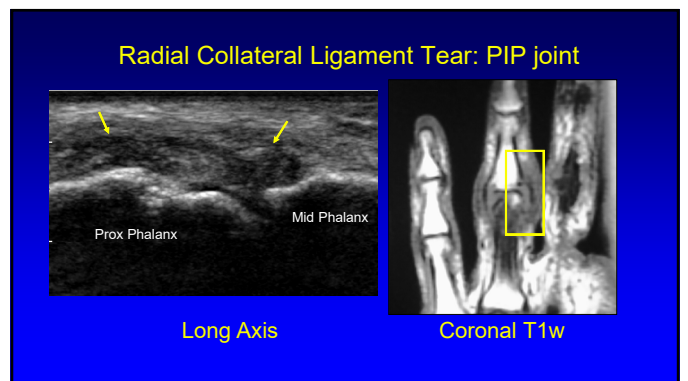
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### Adductor Policis Aponeurosis

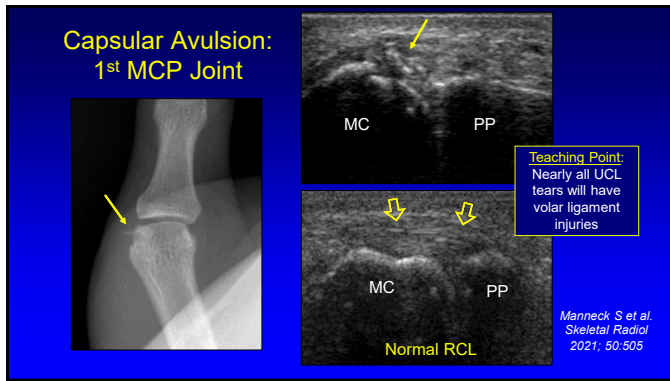
- Superficial to UCL of 1<sup>st</sup> MCP
- Examine long axis to UCL with passive 1<sup>st</sup> IP joint flexion/extension
- Commonly injury with Gamekeeper's thumb
  - Hypochoic and thickened
- Isolated injury: uncommon
  - Diffusely hypochoic thickened

Long Axis to UCL

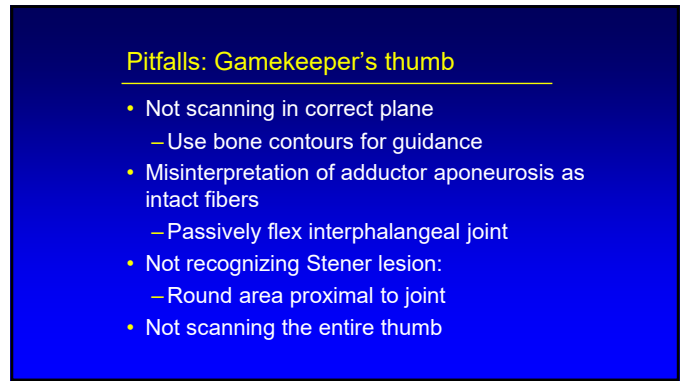
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