Skier’s Thumb

Objectives
1. Review relevant anatomy
2. Review mechanism of injury (skier’s thumb, gamekeeper’s thumb, Stener lesion)
3. Describe imaging findings: plain film, US, MRI
4. Discuss management

Anatomy
- UCL – from base of proximal phalanx to MC head
- Adductor aponeurosis – from adductor pollicis, lies on top of UCL

Skier’s Thumb
- Mechanism of Injury:
  - Abduction and extension causing a valgus force on UCL
  - Avulsion of the ulnar collateral ligament of MCP joint (usually distal insertion)
  - Skier’s thumb – acute
  - Gamekeeper’s – chronic
  - May see # fragment (usually base of phalanx)
  - May be isolated ligament injury

Skier’s Thumb
- Degrees of Injury
  - Sprain
  - Partial tear
  - Complete tear (nondisplaced)
  - Complete tear (displaced)
**Skier’s Thumb – PF**

- Stress views —
  - Radial stress to the 1st MCP joint
  - Positive/unstable
    - > 30 degrees abduction
    - > 15 degrees abduction c/w opposite side

**Skier’s Thumb – US**

**Skier’s Thumb – MRI**

**Stener Lesion**

- UCL ligament stump displaced
- Lies superficial to adductor aponeurosis

**Stener Lesion**

- Displacement of UCL inferred by location of avulsed bone fragment
- Absence of bone avulsion does not eliminate a Stener lesion
- Imaging: US vs. MRI
- “Yo-yo” on a string appearance

Stener Lesion – MRI

"yo-yo" on a string:
- String = aponeurosis
- yo-yo = displaced ligament

Skier’s Thumb

- Treatment
  - Conservative:
    - partial tears
    - sprains
    - nondisplaced fractures
  - Surgical:
    - complete tears especially displaced and Stener lesion
    - large fractures involving articular surface or displaced > 5 mm

The End
Questions?
References


References

- http://www.eorthopod.com
- http://www.orthobullets.com
- http://www.foundrysportsmedicine.com

Acknowledgements:

- Dr. Walter Mak
- Dr. Karen Finlay