Epicondylitis

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Lateral Collateral Ligament Complex

• Radial collateral ligament (arrows)
• Common extensor tendon (E)
• Annular ligament (arrowhead)
• Lateral ulnar collateral ligament (curved arrow)


Tendon Abnormalities:
- Tendinosis: hypoechoic, swollen
- Partial-thickness tear: anechoic focus, no retraction
- Full-thickness tear: discontinuity
  -- Dynamic imaging: retraction

Lateral Ulnar Collateral Ligament (LUCL)

Long Axis
*LUCL attaches at crista supinator of ulna

Radial Head
Ulna
Ulna
**Epicondylitis:**
- Common flexor and extensor tendons
- Abnormal hypoechochogenicity
  - Mucoid degeneration, tendinosis
- Anechoic: partial-thickness tear
- No inflammatory cells*

Potter, Radiology 1995; 196:43
Connell, AJR 2001; 176:777

**Common Extensor Tendon: elbow**
- Often called “tennis elbow” or “lateral epicondylitis” or “epicondylosis” or ……
- All terms are misnomers
- Those inflicted usually do not play tennis (professionally or correctly)
- It is not inflammatory
- It is not a primary problem of the epicondyle

**Common Extensor Tendon: epicondylitis**
- Long Axis
- Short Axis

*Note: normal radial collateral ligament (white arrow)*

**Common Extensor Tendon: tendinosis**
- Lateral Epicondyle
- Radial Head

**Common Extensor Tendon: tendinosis**
- Longitudinal
- Coronal T2w

**Common Extensor Tendon**
- Long Axis
- Short Axis
Common Extensor Tendon:
- Tendinosis
- Radial Head
- Lateral Epicondyle

Common Extensor Tendon: partial tear
- Longitudinal
- Coronal T2w

Common Extensor Tendinosis + RCL Tear

Common Extensor Tendon:
- Elastography
- 100% sensitivity and 94% accuracy in diagnosis of lateral epicondylitis
- Appeared as tendon softening
- Also identified abnormalities of adjacent radial collateral ligament

De Zordo T, AJR 2009; 193:180

Common Extensor Tendon: normal

From De Zordo T, AJR 2009; 193:180
Take-home Points

- “Epicondylitis” is a misnomer
- Tendinosis
- Possible interstitial tear
- With common extensor tendon tendinopathy, look for adjacent RCL tear