

AAP BRS podcast: Epicondylitis and Elbow Injuries

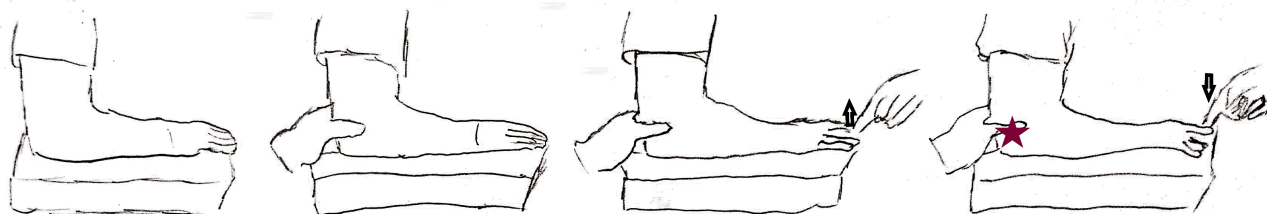
Lateral Epicondylitis (*tennis elbow*)

- Overuse injury, most commonly involving **ECR brevis**; more common than medial epicondylitis
- Risk factors include: repeated pronation/supination of forearm; prolonged hammer use
- Distinguishing Findings: +**Cozen's**, +**Maudsley**, +**Mill's** (see below)
- Distinguish from: **radiocapitellar OA**, **osteochondral loose body** (joint locking, ↓ROM), **radial head fx** (acute)
- Tx: activity modification, elbow strap, PT, heat/ice, percutaneous tenotomy +/- cortisone/PRP, ECRB debridement

Cozen's Test (91% sensitive)



Maudsley Test (66% sensitive)



Mill's Test (76% sensitive)



	Lateral Epicondylitis	Medial Epicondylitis	Elbow Dislocation	Supracondylar Fractures	Olecranon Bursitis
Risk Factors	Repetitive supination & pronation of forearm; "tennis elbow"	Repetitive wrist flexion, repetitive valgus stress upon elbow; "golfer's/pitcher's elbow"			Participation in contact sports (acute or chronic); RA (chronic)
Etiologies	Overuse, most commonly of ECR brevis	Overuse of common flexor tendon of elbow	Fracture Hemarthrosis Ligament injury	Fall on outstretched extremity (extension >> flexion)	Trauma, chronic irritation, inflammation, or infection of bursa
PE & Dx	Clinical diagnosis: + Cozen's , + Maudsley , + Mill's	Medial elbow pain with wrist flexion against resistance	(see below)	Gross deformity & limited ROM on inspection; check for neurovascular compromise (median/radial nerves, pulses, perfusion); often presents with anterior interosseus nerve palsy	Joint aspirate (crystals = inflammatory ; cell count/gram stain/culture for infection)
Tx	Activity modification, elbow strap, PT, ice, percutaneous tenotomy +/- cortisone/PRP, ECRB debridement	Ice, PT, NSAIDs, braces, cortisone	Pain control, splint, surgery if misalignment or ligament damage, PT	Long arm casting (nondisplaced), or reduction and percutaneous pinning (displaced)	Ice, compression

*Not to be confused w/ Little Leaguer's elbow (apophysitis at medial epicondyle in pediatric pts)

Assessment of **Elbow Dislocation** (posterior >> anterior)

- Fracture: distal humerus, olecranon of ulna, radial head (check ROM of elbow extension)
- Hemarthrosis: arterial injury (conduct **neurovascular assessment**)
- Ligament injury: **annular** ("nursemaid's elbow" seen in pediatric pts), **ulnar collateral** (proximal has better prognosis than distal), **radial collateral**

Helpful Resources:

- 1) <https://now.aapmr.org/acute-elbow-injuries-and-overuse-disorders/>
- 2) Dones, et al. "The sensitivity of the provocation tests in replicating pain on the lateral elbow area of participants with lateral epicondylalgia." J Case Rep Clin Res Stud 1.1 (2014): 1.
- 3) Miller, et al. *The 3-Minute Musculoskeletal & Peripheral Nerve Exam*. Demos Medical Publishing, 2008. pp 25-32.