Tennis Elbow

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Plan

- Core Knowledge
- Current Evidence/ Controversies
- Summary
What is Tennis Elbow?

- Overuse syndrome due to repetitive tension overloading of the wrist extensor origins at the lateral epicondyle.
Magnitude of the problem?

5th COMMON INJURY
What causes it

- Racquet sports
- Nondominant arm in golfers
- Hammering & use of screw driver!
- Dorsiflexion/Supination
- Vibration/small grip/ faulty backhand
Pathology

- Microscopic tear in Tendon fibers ECRB
- JBJS Am 2007 anatomical factors
- Tendon invaded by fibroblasts, vascular granulation tissue and myofibroblasts
- This degenerative & Repair is called angiofibroblastic hyperplasia
- Absence of acute/chronic inflammation (Tendinosis)
Symptoms

- Sharp pain in lateral elbow
- Worse with heavy Gripping
- supination/pronation
General Physical examination

- Over-development of dominant arm
Signs

- Provocative maneuvers
- Resisted middle finger extension
- Resisted wrist extension (Mill’s Test) / Resisted supination
Differential Diagnosis

- **Common**
  - Lateral epicondylitis
  - Radial head fracture / referred pain
- **Less common**
  - PIN compression syndrome
  - Lateral plica
  - Posterolateral instability
- **Not to be missed**
  - Radiocapitellar OA / Chondromalacia/OCD
Investigations

- Usually none
- Plain Radiographs (OCD/OA/Calcification)
- USS
Treatment

- No single Rx effective
- Basic principles of soft tissue injury
- Control pain/ Inflammation (RICE)
- Modify activity/Technique/Racquet
- Corticosteroid injection
- Surgery
Open VS Percutaneus Release

- RCT (47) JBJS [Br]2004
- Outcome-DASH
- FU 12/12
- Per group returned to work 3 weeks early
- Improvement in DASH score/ sporting activity better
Operative RX-evidence

- Maffulli et al 2008
- BMB 2008
- Literature review (MEDLINE, CINAHL, EMBASE)
- CMS method/ two reviewer
- No evidence that one operation better than other
Tennis Elbow evidence

- Cowan et al 2007
- JBJS Am
- >90% of published work on Tennis elbow low quality
Summary

- Non-operative management is the mainstay of treatment
- Debate persists
- Recent studies report similar outcome with A/O (JBJS Am 09)
- Either is acceptable as long as pathological tissue is accurately identified and resected
References

- Core knowledge – Books (Campbell, 08; Turk, 05; Current, 05; Secrets, Clinical Sports med, 05; Miller, 07)
- Current evidence (JBJS)
- Illustrations (www)
Thank you