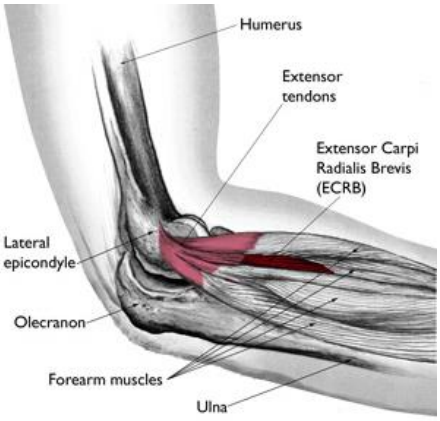
THE ORTHOPEDIC PARTNERS
AN RCM CLINIC
PARK CITY • HEBER CITY • SALT LAKE CITY

Tennis Elbow

(Lateral Epicondylitis)

What is lateral epicondylitis? Lateral epicondylitis (or tennis elbow) is a common condition affecting the lateral (or outside) aspect of the elbow where the extensor carpi radialis brevis (ECRB) muscle originates (see below). The condition causes elbow and forearm pain, especially when lifting or grasping.



American Academy of Orthopaedic Surgeons, 2003. Orthoinfo.aaos.org

What causes lateral epicondylitis? A distinct cause has not been clearly defined. Despite its name, fewer than 5-10% of those with this condition actually play tennis.[1] Furthermore, although the name implies an inflammatory process ("itis" means inflammation), several studies have not implicated inflammation as a cause of this condition but have suggested microtearing of the tendon followed by an incomplete healing response,[2] due to idiopathic (unknown) causes or too much stress on the tendon.

What are the treatments for lateral epicondylitis? Much controversy in treatment exists.

- *Nonsurgical options:* include NSAIDS, physical therapy, modalities such as ultrasound, extracorporeal shock wave therapy (ESWT), stretching, bracing, steroid injections, botulinum toxin and platlet-rich-plasma (PRP) injections. PRP injections have shown some benefit,[3] but more research is needed. There may be a short-term pain relief advantage with an injection[4], but a recent meta-analysis showed no difference in pain intensity 6 months after corticosteroid or placebo injection.[5]
- *Surgical options:* include open ECRB release, radiofrequency microtenotomy, or arthroscopic debridement. A recent Cochrane review of the current literature of surgical options for this condition concluded that there was "insufficient evidence to support or refute the effectiveness of surgery for lateral elbow pain."[6] Furthermore, although the risks of surgery are small, they may be significant, such as recently reported cases of profound nerve damage following arthroscopic surgery.[7]

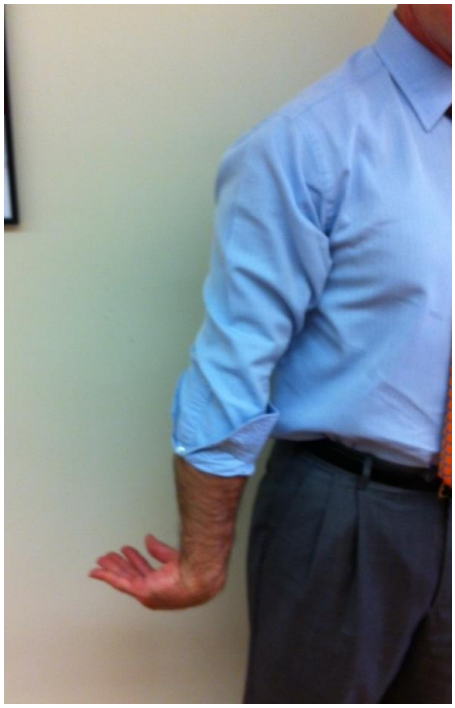
---

[1] Boyer, MI, & Hastings, H. JSES 1999;8:481-91.
[2] Rineer CA & Ruch DS. JHS 2009 Mar;34:566-76.
[3] Gosens, et al. Am J Sports Med. 2011 Jun;39(6):1200-8.
[4] Sims et al., HAND 2014 9:419-446
[5] Claessen et al., J Hand Surg Am. 2016 Oct;41(10):988-998.e2.
[6] Buchbinder et al., Cochrane Database of Systemic Reviews 2011, Issue 3. Art No.: CD003525.
[7] Carofino, et al. JHS 2012, 37 (6):1208-1210.

Recommendations:

Based on several years of successful experience in treating this condition by the senior author (RJS), the current research, and our desire for a minimalist, nonsurgical approach to this condition, we recommend the following three things:

1) DO NOT RUB THE OUTSIDE OF YOUR ELBOW (Lateral Epicondyle)
    - Rubbing it or massaging it seems to make it worse despite what therapists recommend.
2) LIFT WITH YOUR HAND FACING PALM UP, NOT PALM DOWN.
    - This takes the strain off the lateral epicondyle.
3) MOST IMPORTANTLY, PERFORM THE FOLLOWING STRETCH **EVERY HOUR WHILE AWAKE FOR THE COUNT OF 5 SECONDS**.
    - This stretches the ECRB tendon to help alleviate the symptoms.
        - Shoulder internally rotated (turned in), elbow fully extended (straight), and wrist fully flexed. Use your own power to flex your wrist.
        - Do this stretch for 3 months. You will feel worse the first 2 weeks and marginally better at the 6 week mark. Continue stretching and this should continue to feel better in 3 months' time.



US SKI & SNOWBOARD OFFICIAL MEDICAL PROVIDER

Authors: Patrick R. Olson, MD and Robert J. Strauch MD