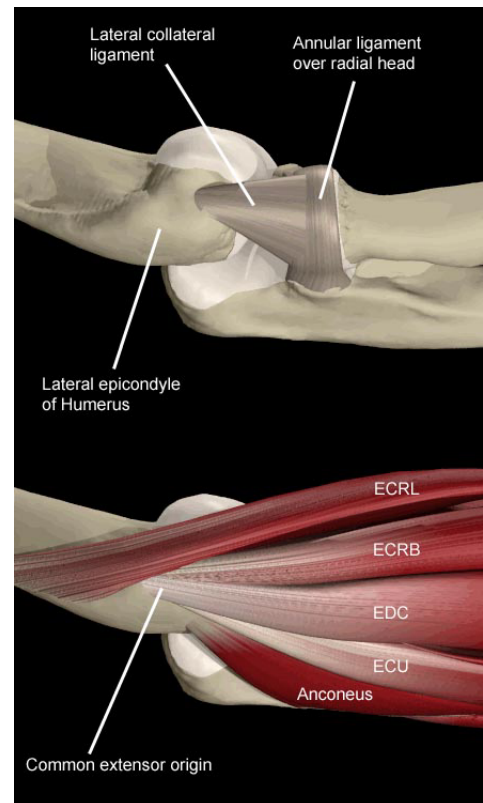


TENNIS ELBOW PROCEDURES

General Very common overuse disorder, typically affecting middle-aged recreational racquet sports players; can affect any occupation involving repetitive wrist extension.

Pathology 'Lateral epicondylitis' is a misnomer; this is not an inflammatory condition. Light & electron microscopy show heavy infiltration with disorganized fibroblasts, immature vascular elements and disorganized collagen replacing normal tendon material. This pathology is termed **angiofibroblastic tendinosis** and is due to repeated microtrauma resulting in ineffective and abnormal attempts at tendon repair, frustrated by repeated stress. ECRB has been implicated as the primary site; EDC is also affected in 30%. Inflammatory cells are notable by their absence, except in acute, early cases. Treatment by repeated steroid injection is therefore likely to be ineffective and probably deleterious.



Staging

- I **Acute, reversible inflammation**
minor aching after heavy use
quick response to simple anti-inflammatory measures
- II **Partial angioblastic invasion**
intense pain with activity, some rest pain
treatment promoting healing gradually resolves
most can be managed non-operatively
- III **Extensive angioblastic invasion (<5% of total)**
severe pain on use
rest and night pain
usually rupture of ECRB
most require surgery
- IV **Stage 3 + soft tissue calcification**

Management Most cases can be managed non-surgically by a combination of following:

Pain control RICE, U/S interferential etc, NSAIDs, steroid injection

Promotion of healing Resistance-based exercise regime, continued over 3/12

Activity modification Lighter racquet, office ergonomics, different tools, etc

TENNIS ELBOW PROCEDURES

Surgery

Numerous surgical procedures have been described for lateral elbow pain but none have been evaluated in the context of a randomised controlled trial. These include open common extensor origin release, percutaneous extensor origin release, partial excision of extensor origin with repair, musculotendinous lengthening at the wrist, Z-lengthening of the extensor carpi radialis brevis, bursectomy, excision of the synovial fringe in the radiohumeral joint, denervation of the articular branches of the radial nerve to the elbow, excision of the annular ligament, a combination of several of these procedures, and arthroscopic release.

Case series have usually reported good outcomes with respect to alleviation of pain and few adverse effects. However, in the absence of a control group, it is not possible to draw any conclusions about the benefits or risks associated with surgical interventions for lateral elbow pain. While operative interventions may be of value for those patients with persisting lateral elbow pain who have failed to improve despite conservative treatments, surgery is an unproven treatment modality at this time).

Surgery is necessary only in those failing conservative management. The aim is removal of pathological material in ECRB ± common extensor origin, and stimulation of neovascularization by drilling epicondyle. This promotes healthy scar formation. Nirschl claims complete resolution in 85% and partial response in a further 12% with this technique.

References

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