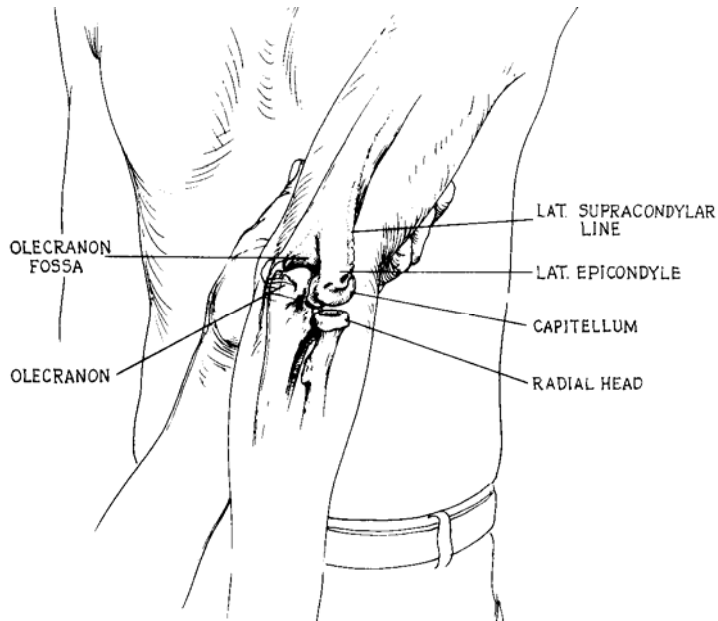


Tennis Elbow



Lateral Epicondylitis

WHAT IS IT?

- inflammation of the forearm and wrist muscles / tendons that attach to the bone on the outside of the elbow ~ the lateral epicondyle

HOW DO THE MUSCLES AND TENDONS WORK?

- extend the wrist and fingers, as well as contract when making a fist, lifting, or carrying things
- turn forearm up ~ 'palm up' position termed supination

WHAT HURTS?

- tender lateral epicondyle ~ bony point on outside of elbow
- may have radiating pain into the forearm
- pain on grasping, squeezing, or lifting objects
- pain when bending and straightening elbow, and when rotating forearm
- pain with repetitive use at home or work for example painting, hammering, cleaning, computer work, writing.
- pain is **NOT** limited to tennis players or athletes!!

WHAT SHOWS UP ON X-RAY?

- usually nothing
- calcium deposit in advanced stage only occasionally
- arthritic changes at the lateral elbow joint where the radius meets humerus - not often

WHAT CAUSES IT?

- overuse, sport or daily activity related
- weak forearm muscles or imbalance between flexor and extensor muscle groups
- inadequate flexibility or endurance

- improper stroke technique - use of arm instead of body
- novice player more at risk
- equipment error - heavier, stiffer racquet, grip size, too tight stringing
- direct trauma
- cervical spine nerve pinching
- adverse neural tension ~ lack of mobility of nerve tissues
- residual dysfunction of other upper extremity joints

WHY DOES IT HURT?

- muscle and tendon overexertion causes pulling of tendon from bone
- microtearing of tendon, inflammation, scar tissue formation and shortening of tendon
- becomes easier and easier to tear or re-injure unless treated properly
- poor nutrition from the nerve to the lateral epicondyle also causes tendon degeneration and pain

WHAT DO I DO?

- rest from painful activities and apply ice or heat depending on situation and condition
- analyze cause, address biomechanical causes with appropriate stretching of shortened or stiff structures and strengthening of relatively weak areas as outlined by your physiotherapist



- correct equipment and technique errors
- use of a brace to minimize stress on the injured area
- use of ice in acute, more painful conditions
- deep transverse friction massage breaks down scar tissue, relieves pain, and promotes healing if done properly and at the right time
- anti-inflammatory medication, if necessary, as prescribed by your physician
- therapeutic modalities: ultrasound, interferential current, etc...
- cortisone injection ~ only if necessary, by your physician

HOW DO I PREVENT IT?

- avoid overuse ☞ be smart and gradually increase intensity, frequency, and duration of play
- avoid technique errors - get a lesson or two!
- make sure equipment is adequate - get a 'tune-up' if necessary
- improve flexibility and strength of forearm muscles
- maintain mobility of all upper extremity joints, including wrist, shoulder, and neck too!

WHAT ELSE CAUSES PAIN IN THIS
AREA?

- joints of the cervical and upper thoracic spine
- muscles of the shoulder region
- elbow ligaments
- elbow joint arthritis
- nerve entrapment ~ pinched nerve
- adverse neural tension in the upper extremity
- periostitis ~ inflammation of the bone
- bursitis at the elbow
- rheumatoid arthritis, gout and other systemic disorders

MANUAL THERAPY BASES TREATMENT ON THE CLINICAL PROFILE OF
DYSFUNCTION
IT IS A PLANNED, LOGICAL, SAFE, AND EFFECTIVE APPROACH

AT THE CENTRE FOR MANUAL PHYSIOTHERAPY
WE FEEL THIS IS WHAT OUR PATIENTS DESERVE

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