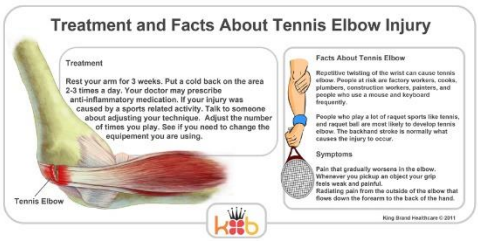
Lateral Epicondylitis

"Tennis Elbow"



What is Lateral Epicondylitis?

Lateral Epicondylitis, or "tennis elbow" is tendinosis of the lateral epicondyle.

Tennis elbow or **lateral epicondylitis** is a condition in which the outer part of the elbow becomes sore and tender at the lateral epicondyle. The forearm muscles and tendons become damaged from repetitive excessive use. This leads to pain and on the outside of the elbow.

Lateral Epicondylitis is a condition sustained due to repetitive use of the several muscles used to flex the hand and digits.

Repetitive use of muscles of the forearm can cause acute or chronic tendonitis.

Tendonitis- swelling of a tendon

Humerus- upper arm bone.

The difference between the conditions Lateral Epicondylitis and Medial Epicondylitis:

How does Tennis Elbow present clinically?

- Use of muscles in forearm causes pain.
- Athletes complaining of pain on the outer part of the elbow.
- Pain in gripping objects.
- Stiffness moving elbow or hand and numbness in elbow or hand, particularly in flexing or rotation.

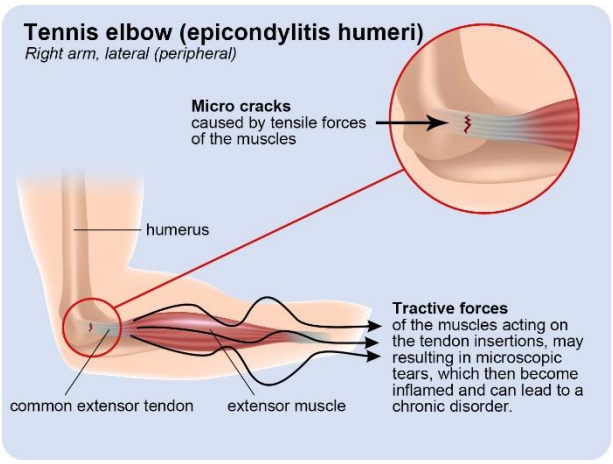
What are the causes of Tennis Elbow?

- Overexertion of the forearm muscles. Classically during repetitive playing of tennis.
- Damage to the extensor carpi radialis brevis muscle.
- A direct blow to the epicondyle.
- Over hitting a tennis ball incorrectly when learning to play causes shock to elbow joint and may contribute to lateral epicondylitis.

How can Tennis Elbow be treated?

Mild analgesics such as aspirin and paracetamol for mild lateral epicondylitis.

- Non-steroidal anti-inflammatory drugs (NSAIDs).
- Corticosteroidal injections.
- Physiotherapy.
- Surgery if serious damage has been sustained.



Fibro dysplasia ossificans progressiva

"Stone man syndrome"

What is Fibrodysplasia ossificans progressiva?

- Also known as "stone man syndrome".
- An autosomal dominant genetic condition.
- Fibrodysplasia ossificans progressiva (FOP) is a genetic disorder that causes muscle tissue, connective tissue and ligaments to be replaced by bone, this is called ossification.
- This ossification constrains movement with crippling consequences.
- Bone formation causes mobility loss, including inability to open mouth resulting in malnutrition.
- FOP is rare, with only 3,200 global cases.

Clinical Presentation

- Patients suffering from FOP are typically born with malformed big toes.
- Abnormally big toes is a key distinguishing feature of FOP.
- Common misdiagnoses include juvenile fibromatosis and lymphedema.
- Shortened great toes with hallux valgus deformity "Tumor-like" soft tissue swellings on the neck, shoulders, or back.
- A mutated AVCR1 test is the best indication of a patient with FOP.

Causes of Fibrodysplasia ossificans progressiva

- Mutations in the ACVR1 gene cause fibrodysplasia ossificans progressiva.
- The ACVR1 gene provides instructions for producing a member of a protein family called bone morphogenetic protein (BMP) type I receptors. The ACVR1 protein is found in many tissues of the body including skeletal muscle and cartilage.
- It is mutation of the AVCR1 gene that causes FOP.
- Trauma to muscles causes FOP "flare ups". A "flare up" is the term for rapid ossification.

Treatment

- No effective medical therapy is known for fibrodysplasia ossificans progressiva; corticosteroids are only useful during the flare ups.
- Gene therapy may hold promise in fibrodysplasia ossificans progressiva treatment.
- Systemic steroids are sometimes used for acute flare-ups of ossification.
- https://www.youtube.com/watch?v=cTxYXBi2Tpw