

# ACHILLES TENDON RUPTURE

## Background:

- The Achilles Tendon is the largest tendon in the body.
- Achilles ruptures are common in patients aged 30 - 50
- Patients report a sharp pain in the back of their heel after suddenly changing directions, often during sports.
- Patients often think they were “struck in the back of the heel” and then realize that there was no one around them.
- Ruptures often occur during sudden change of direction movements because during these movements the calf muscle generates tremendous force within the Achilles tendon.

## Diagnosing Achilles Tendon Ruptures

- After the injury, patients will have some swelling. If they can walk at all, it will be with a marked limp.
- An Achilles rupture serves to de-function the calf muscle, which is the main muscle used for walking and running.
- Diagnosis of an Achilles rupture is made on physical examination.
- An Achilles rupture is not diagnosed on X-rays.
- An MRI is not indicated for acute ruptures unless there is some uncertainty about the diagnosis.

## Treatment of Achilles Ruptures

- Treatment can be non-operative with a functional rehabilitation program OR operative with a direct repair of the ruptured tendon
- Achilles ruptures must be specifically treated as neglected Achilles tendon ruptures lead to a marked limp.
- Non-operative treatment with a functional rehabilitation program has been shown to be an effective treatment in recent studies
- In deciding the best treatment the risks and benefits of each treatment approach need to be carefully weighted:
- Advantages of operative treatment include:
  - *Faster recovery:* Therefore patients will lose less strength.
  - *Early Ankle movement:* So it is easier to regain motion.
  - *Lower Re-rupture Rate:* A re-rupture at a later date is less common in patients treated operatively (2-5%) vs. non-operatively (8-15%).
- Disadvantages of operative treatment include the potential for a significant complication such as:
  - Wound healing problems
  - Deep infection
  - Painful scar formation
- Patients with medical problems such as diabetics, smokers or older patients may be best served with non-operative treatment.
- An initial period of protected weight-bearing will be required.

