

Management of Achilles Tendon Rupture

Introduction:

Achilles tendon is a large ropelike band of fibrous tissue in the back of the ankle that connects the powerful calf muscles to the heel bone. It is the largest tendon in the human body. When the calf muscle contracts, the Achilles tendon is tightened, pulling the heel. It allows you to point your foot and stand on tiptoe. It is vital to activities like walking, running, and jumping.

Risk factors of Achilles Tendon Rupture:

- Aging
- Lack of use
- Diseases like arthritis, diabetes mellitus
- Medication like corticosteroid , antibiotics
- Sports activities requiring bursts of jumping, pivoting and running like badminton, tennis, basketball

Symptoms:

- A sudden and severe pain felt in the back of the ankle
- A loud pop of snap sound
- A gap or depression may be seen or felt at the tendon above the heel bone
- Pain, swelling and bruise in the back of the ankle, followed by ankle weakness that makes stand on tiptoe and push off when walking impossible

Exam and Tests:

- Absence of planterflexion of the involved ankle when squeezing the calf muscle with the patient in prone position in case of complete Achilles tendon rupture (Simon test)
- Ultrasound and MRI can assist in difficult diagnosis and assist in treatment

Treatment:

- Do not delay ! Early treatment results in better outcome!

Non – Surgical

- ✧ A cast or brace is put on the leg for 6 to 8 weeks to help the tendon to heal
- ✧ No surgical complications like infection and neurovascular injury
- ✧ The tendon may re-rupture in about 13 in every 100 patients

Surgical

- ✧ Recommended for young active people
- ✧ Open vs percutaneous repairs to stitch the tendon ruptured ends together so that it can heal
- ✧ After surgery, a cast or brace will be put on the leg to help the Achilles tendon to heal

Prevention of Achilles Tendon Rupture:

- Gradually increase the intensity and length of time when starting a new exercise regime
- Warming up the muscles before exercise and cooling them down after finish may help
- Calf muscle stretch exercise can lengthen the Achilles tendon and reduce the risk of tendon rupture during exercise