

Patella Tendon Rupture

Introduction

Patella tendon rupture is a tear of the patella tendon. The injury is more common among young and active people.

Cause

The rupture occurs as a result of rapid contraction of the quadriceps while the knee is in flexion (bent) as the patient falls.

Certain pre-existing conditions can predispose the kneecap tendon for such an injury. These conditions include tendinopathy, repetitive “micro-traumas” over time; tendon degeneration; and previous injections of steroid into the tendon.

Systemic diseases, such as systemic lupus erythematosus (SLE), may also increase the risk of patella tendon rupture because the tendon is chronically inflamed.

Symptoms

A popping sound and tearing sensation followed by severe disabling pain below the kneecap is felt by the patient during the injury. He will then notice intense swelling of the knee with difficulty in bearing weight.

Diagnosis

The injury can usually be diagnosed when the doctor palpates the knee and feels a defect along the tendon, and when he observes that the knee cannot be straightened. An X-ray of the affected area will also show that the kneecap has moved up along the thigh.

Non-Surgical Treatment

- Immobilization of knee in extension by a brace or plaster
- But healing between the tendon ends may be less than optimal
- Full knee extension will not be restored if the patella tendon does not recover to its original length
- Non-surgical treatment may be useful in cases of partial patella tendon tears.

Surgical Treatment

Early surgical repair is the usual treatment of choice. The torn tendon ends will be opposed by suture in its near anatomical position under general or regional anaesthesia.

Rehabilitation

After the surgery, a cast or brace is often used to protect the area during the rehabilitation process. The repaired tendon usually takes 6 to 12 weeks to heal but may take up to 6 to 12 months for it to return to its normal strength and function.

Prevention

Regular training of the lower limbs, especially the quadriceps and hamstring muscles, helps to prevent overuse of the patella tendon. Flexibility training of the knee muscle is equally important in avoiding the occurrence of patella tendonitis/tendinopathy, which is a risk factor for patella tendon rupture.