

KNEE

Meniscus Root Tear

The knee has two menisci — a medial (inner) and a lateral (outer) meniscus — that act like shock absorbers, helping protect the cartilage and keep the knee stable. A meniscal root tear is a tear where the meniscus attaches to the bone. Because this attachment is crucial, a root tear can stop the meniscus from working properly, even when the tear itself looks small.

Why root tears are important

When the meniscal root is torn, the meniscus can no longer absorb shock properly, pressure in the knee increases, and the knee begins to behave as though the meniscus has been removed. This can lead to arthritis relatively quickly if not treated, which is why root tears are considered more serious than many other meniscus tears.

How they happen

Sudden injury — twisting the knee, squatting or rising from a squat, sports injuries, or slipping and falling.

Wear and tear (degenerative tears) — more common in people over 40, and can happen during normal activities, often without a major injury.

Symptoms

- Pain, usually at the back or inside of the knee
- Swelling, often appearing a day or two after activity
- Difficulty squatting or kneeling
- A feeling of instability
- Sometimes a pop at the time of injury
- Pain that does not improve with rest or physical therapy

Some people can still walk but notice worsening pain over time.

How it's diagnosed

A clinical examination, along with an MRI scan — the best test to identify a root tear, since these injuries can be missed without it. X-rays may also be done to check for arthritis.

Treatment

Non-surgical treatment may be considered if there is advanced arthritis, the tear is old with mild symptoms, or surgery isn't suitable — including activity modification, physical therapy, pain relief, and weight management. However, non-surgical treatment does not restore meniscus function.

Surgical repair is often recommended when there is little or no arthritis, pain and swelling persist, the patient is active, and the tear is recent. Surgery aims to reattach the meniscus root to the bone, restore normal load-sharing in the knee, and slow or prevent arthritis progression. It is usually performed arthroscopically.

Recovery

Recovery is slower than for other meniscus tears, since the repair needs protection — typically crutches for four to six weeks, limited weight-bearing initially, and restricted knee bending at first, with physical therapy for several months.

- Normal walking: 6–8 weeks
- Sports: 4–6 months

If left untreated

Especially in an otherwise healthy knee, an untreated root tear can lead to ongoing pain and swelling, rapid cartilage wear, early arthritis, and possibly the need for knee replacement earlier in life.

Key takeaway

Meniscal root tears are serious injuries that stop the meniscus from working properly. MRI is essential for diagnosis, surgery may help protect the knee if done early, and rehabilitation is important for a good outcome.