



# Achilles Tendinopathy

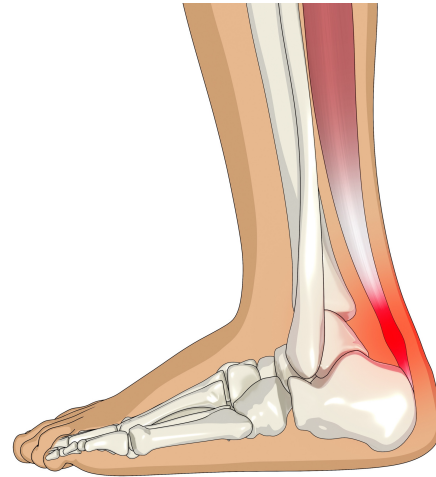
A Patient Information Guide — Diagnosis, Treatment & Recovery

## What is Achilles Tendinopathy?

Achilles tendinopathy is a painful, degenerative condition of the Achilles tendon — the large, powerful tendon that connects the calf muscles to the heel bone and drives every step you take.

Unlike insertional tendinopathy (which affects the point where the tendon meets the heel bone), mid-substance Achilles tendinopathy develops within the body of the tendon itself, typically around 4–6 cm above the heel. This is the region of the tendon with the poorest blood supply, making it more vulnerable to accumulative damage and slower to heal.

The condition affects active and inactive people alike, and when left untreated can become unrelenting and significantly debilitating. The pain can persist for months or years and may limit even basic daily activities such as walking.



Mid-substance Achilles tendinopathy

## What Causes Achilles Tendinopathy?

The precise cause is not fully understood, but several well-recognised factors contribute to the development of mid-substance tendinopathy:

- Calf muscle tightness (gastrocnemius contracture) — the most consistently identified driver. A tight calf increases the mechanical load placed on the tendon with every step, accelerating wear and limiting the tendon's ability to recover between bouts of activity
- Overuse and training errors — a sudden increase in training volume or intensity, particularly in runners and jumping athletes, overwhelms the tendon's capacity to adapt
- Plantaris friction syndrome — the plantaris is a small, vestigial tendon that runs alongside the Achilles. In some people it rubs against the inner surface of the Achilles tendon, causing localised irritation and tendon degeneration
- Poor footwear or training surfaces



- Age-related changes in tendon collagen structure, making the tendon more prone to degeneration over time
- Systemic factors including obesity, diabetes, high cholesterol, and the use of fluoroquinolone antibiotics

## Non-Surgical Treatment

Conservative treatment is always the starting point, and when done properly and consistently over sufficient time, it resolves symptoms completely in the majority of patients. The key word is consistency — a half-hearted approach rarely succeeds.

- Calf stretching and eccentric loading — a structured programme of eccentric heel drop exercises is the most evidence-supported treatment for Achilles tendinopathy. Eccentric exercises (lowering the heel slowly below a step) place controlled load through the tendon, stimulating healthy collagen remodelling
- Tendon rolling and massage — self-massage with a foam roller or massage ball helps maintain tissue mobility and reduce tightness in the calf-tendon complex
- Footwear — supportive athletic shoes with adequate heel cushioning reduce impact load. A small heel lift worn inside the shoe can provide immediate symptomatic relief
- Load management — avoiding high-impact activities during flare-ups while maintaining low-impact conditioning (swimming, cycling)
- Physiotherapy — a structured tendon rehabilitation programme delivered by a physiotherapist is the cornerstone of conservative management



Foam roller massage — 5 minutes per session



Eccentric heel drop — 1 minute, repeated ×3 per session

Exercises should be performed twice daily. Persist with the programme for at least 12 weeks before assessing whether surgery is warranted — tendon remodelling takes time.



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## Shockwave Therapy

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Shockwave therapy is a valuable non-surgical adjunct for patients who have not responded adequately to exercise rehabilitation alone. It uses high-energy acoustic (sound) waves delivered through the skin to the affected tendon via a handheld device.

The mechanical stimulation promotes increased blood flow, breaks down abnormal calcification within the tendon, and triggers the body's own healing response to produce new, healthy collagen. Multiple randomised controlled trials support its effectiveness as part of a comprehensive tendinopathy management programme.

Shockwave therapy is performed by the physiotherapy team as an outpatient.



Shockwave therapy — delivered directly over the Achilles tendon

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## When is Surgery Recommended?

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Despite best efforts with conservative treatment, approximately 30–40% of patients with Achilles tendinopathy do not achieve satisfactory relief and ultimately require surgery. Surgery is considered when symptoms have persisted for at least 3–6 months despite a genuine and consistent trial of physiotherapy, exercise rehabilitation, and shockwave therapy.

Dr Maritz strongly favours minimally invasive surgical approaches over traditional open debridement. Less tissue disruption means a lower risk of wound complications, less post-operative pain, and a faster return to activity.

The precise procedure — or combination of procedures — is tailored to each patient based on the underlying cause identified during clinical assessment and imaging:

### 1. Proximal Medial Gastrocnemius Recession

When calf tightness (gastrocnemius contracture) is identified as the primary driver, releasing the contracture addresses the root cause rather than simply treating the tendon itself. Through a small incision at the back of the knee, the tight fascial covering of the gastrocnemius muscle is precisely



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released. The muscle and the tendon remain completely intact — only the restricting fascial layer is divided.

This reduces the excessive mechanical load on the Achilles tendon and allows it to heal. It is a straightforward procedure with a swift recovery.

## 2. Plantaris Tendon Resection

In patients where plantaris friction syndrome is identified as the cause — confirmed by MRI or ultrasound showing the plantaris tendon pressing against the inner Achilles — resection of the plantaris tendon is performed. Through a small keyhole incision, the offending tendon is located and removed. PRP is then injected directly into the Achilles tendon to accelerate healing. This approach allows for a significantly faster recovery than traditional open debridement.

## 3. Platelet-Rich Plasma (PRP) Injection

PRP is an orthobiologic treatment that harnesses the body's own healing potential. A small sample of the patient's blood is drawn and processed in a centrifuge to concentrate the growth factors and platelets. This platelet-rich preparation is then injected directly into the diseased segment of the tendon at the time of surgery.

The concentrated growth factors stimulate the tendon's own repair mechanisms, promoting collagen regeneration and tissue healing. PRP is used as an adjunct to the surgical procedure, not as a standalone treatment.



Platelet-rich plasma — prepared from the patient's own blood

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## Understanding the Risks

Dr Maritz's minimally invasive approach significantly reduces the risk profile compared to traditional open surgery, but as with any procedure, risks should be understood and considered:



- Persistence of symptoms — surgery resolves tendinopathy symptoms in the majority of patients, but a small proportion may not achieve complete relief, particularly in cases of longstanding or severe degeneration
- Achilles tendon rupture — untreated, progressive tendinopathy itself carries a risk of spontaneous rupture. Rupture after surgery is rare, but the healing tendon must be protected appropriately during recovery
- Wound complications — infection and poor wound healing are uncommon with minimally invasive techniques but can occur. Do not remove or tamper with dressings
- Nerve or vessel injury — small sensory nerves around the incision site may be affected, causing areas of temporary or occasionally permanent altered sensation
- Calf weakness — some reduction in calf strength and push-off power may be experienced after a gastrocnemius recession. This typically resolves fully with structured physiotherapy
- Bleeding and scar formation — standard surgical risks, minimised with the keyhole approach

## Your Recovery

Surgery is performed as a day case — you will be admitted to hospital and go home the same day. The procedure is performed under general anaesthetic.

### Recovery at a Glance

#### Immediately after surgery

- You will be fitted with a moonboot and can bear full weight on the leg from the outset — no crutches required
- A dressing is applied over the incision on the Achilles — leave this completely undisturbed until your follow-up
- Elevate the leg and apply ice packs (20 minutes, twice daily) to minimise swelling
- Keep the dressing and moonboot dry — use a waterproof cover when showering

#### Day 10 appointment

- Two sutures are removed and the wound is assessed
- Once the wound has healed, rehabilitation exercises begin

#### Weeks 2–6: Moonboot and early rehabilitation

- Continue wearing the moonboot for approximately 4 weeks from surgery
- Physiotherapy begins as soon as the wound has healed, focusing on gentle range of motion, calf strengthening, and gait retraining
- Some swelling and tightness is normal at this stage and will settle progressively

#### Longer-term milestones

- Normal shoes: from approximately 4–6 weeks once the moonboot is weaned



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- Return to work (desk-based): within 1–2 weeks | Return to work (on your feet): 4–6 weeks
- Light exercise (walking, cycling, swimming): from 4–6 weeks
- Running and return to sport: from 3–6 months, guided by physiotherapy progress and symptom resolution

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## Supporting Your Recovery

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The following measures will help optimise your healing and get you back to full activity as quickly as possible:

- Do not smoke. Smoking impairs both tendon healing and wound repair, and significantly increases the risk of complications.
- Maintain a nutritious, protein-rich diet to provide the building blocks for tendon collagen repair.
- Take prescribed pain medication regularly, particularly during the first week.
- Elevate the leg and apply ice packs (20 minutes, twice daily) during the first two weeks to control swelling.
- Commit fully to your physiotherapy programme — the surgical procedure creates the conditions for healing, but rehabilitation is what restores strength, flexibility, and function.
- Move your toes regularly inside the moonboot to maintain circulation.

### **⚠ Important: When to Contact Us**

If you have any concerns following your surgery — about pain levels, the wound, excessive swelling, or anything else — please contact Dr Maritz's rooms directly. Early communication allows us to address any concern promptly and keeps your recovery on track.