



Ankle Instability

A Patient Information Guide — Chronic Lateral Ankle Instability & Arthroscopic Repair

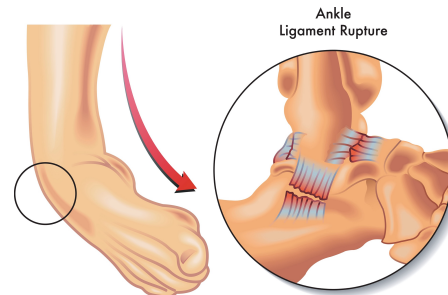
What Is Ankle Instability?

Ankle instability is a condition in which the ankle repeatedly gives way, feels unreliable underfoot, or is prone to rolling — particularly on uneven ground or during sport. It develops when the lateral (outer) ligaments of the ankle are damaged by a sprain and do not fully recover their normal strength and function.

Ankle sprains are among the most common injuries seen in both athletes and the general population. The vast majority heal well with the right early management. However, in a significant number of people the ligaments remain weakened or lax, leading to ongoing instability and pain that can progressively affect quality of life, sport, and ultimately the health of the ankle joint itself.



Lateral ankle ligament complex



Lateral ligament rupture

Important distinction: Not all ankle instability is the same. Dr Maritz recognises the distinct patterns that require different approaches — micro-instability, classic instability and rotational instability are examples of different instability patterns. Understanding which type you have is important for management.

Understanding the Lateral Ankle Ligaments

Recent anatomical research has significantly updated our understanding of the lateral ankle ligaments — and this directly changes how we diagnose and treat instability. Rather than three simple ligaments, the outer ankle is now understood to have two functionally distinct structures:



The Two Lateral Ligament Structures

1. Superior Fascicle of the ATFL (Anterior Talofibular Ligament)

This is an intra-articular ligament — it sits inside the ankle joint. Because it is bathed in synovial fluid, which inhibits the clot formation needed for healing, it has very limited capacity to repair itself after rupture. When this ligament alone fails to heal, it produces micro-instability.

2. The LFTCL Complex (Inferior Fascicle ATFL + Calcaneofibular Ligament)

This is an extra-articular structure — it lies outside the joint. Because it is not exposed to synovial fluid it has excellent healing potential. When this complex also fails, the result is classic, overt ankle instability. Importantly, because of this good healing potential, 80% of these injuries will recover fully with proper rehabilitation — surgery is rarely needed for this ligament alone.

Instability Symptoms

Symptoms vary depending on the type of instability and the severity. Most patients have pain on the outside of the ankle. Sometimes swelling is present. Patients often do not trust their ankles on uneven ground or whilst performing sport activities.

A history of a previous sprain or injury is usually present

Why Is It Important to Treat?

Ankle instability is not simply a nuisance — left unaddressed, it sets in motion a progressive cascade of joint damage:

- Repeated microtrauma to the joint cartilage with each giving-way episode
- Development of osteochondral defects — areas where cartilage has been damaged or lost
- Accelerated wear of the ankle joint, leading to early arthritis

⚠ Untreated ankle instability is a known cause of premature ankle osteoarthritis. The progression from first sprain to end-stage arthritis, while slow, is well documented. Early, effective management — both conservative and surgical when needed — is the best protection for your ankle joint.



Non-Operative Management

Functional rehabilitation should always be the first line of treatment. Rigid immobilization in a moonboot or plaster cast actually slows recovery — ligaments need controlled movement to heal optimally. The goal is to restore strength, proprioception (the ankle's positional awareness), and neuromuscular control.

Following an Acute Ankle Sprain

Lace-up ankle brace — worn consistently during activity; is preferable to a rigid moonboot as it supports the ankle while still allowing movement

Full weight-bearing as tolerated from the outset — walking on the ankle, even when sore, promotes better recovery than crutches and non-weight-bearing

Physiotherapy — focused on peroneal muscle strengthening, single-leg balance, proprioceptive training, and progressive return to sport-specific movement

Anti-inflammatory medication for short-term symptom relief during the acute phase

Rest, Ice, Compression and elevation (**RICE Protocol**) to alleviate initial swelling



The **VeroAnkle Brace** is a dynamic brace allowing both movement and stability

For Ongoing Instability

Patients who have symptoms persisting beyond three months, or who have not responded adequately to rehabilitation, should be assessed for surgical options.

⚠️ If the ligaments have failed to heal, no amount of rehabilitation will restore the missing ligament. Ongoing physiotherapy without progress is not appropriate.



DR MARK MARITZ
ORTHOPAEDIC SURGEON

Surgery: Arthroscopic Ankle Ligament Repair

When conservative management fails to resolve instability, surgery is recommended. Dr Maritz uses a fully arthroscopic (keyhole) approach — recognised internationally as the current gold standard for ankle ligament repair.

Why arthroscopic / keyhole rather than open surgery?

Traditional open ligament repair techniques require a larger incision and can over- or under-tension the repaired tissue, potentially altering the mechanics of the ankle joint. Arthroscopic surgery allows Dr Maritz to identify the precise anatomical attachment points of each ligament and repair them in their correct positions — a truly anatomic repair. Benefits include lower complication rates, less wound-related morbidity, and earlier return to sport compared to open techniques.

The Procedure

Dr Maritz performs the surgery arthroscopically with a small camera. The operation is performed under general anaesthetic, usually as a day procedure. The ligaments are re-attached to their previous anatomic position and at the correct tension. If ligament tissue is poor, then a reconstruction creating a new ligament is done. The procedure takes about an hour to perform.

Recovery

Recovery after arthroscopic ankle ligament repair is structured to protect the repair while avoiding the pitfalls of excessive immobilisation.

Recovery at Glance

Immediate Post-Operative Period

You will go home in a post-operative dressing and a moonboot. You may fully weight bear once pain and swelling allows. Usually day 3.

Keep the foot elevated as much as possible for the first few days

Ice or a cooling device applied over the dressing, 20 minutes several times a day

Gentle toe and knee movements to maintain circulation

1st Follow-up at 10 days

Wound are cleaned. Sutures are dissolvable and do not require removal



Weeks 1–6: Moonboot Phase

You will wear a walking moonboot for six weeks. Full weight-bearing is encouraged from the outset — walking in the boot is beneficial and does not threaten the repair. A brace can be worn at night

Weeks 6–12: Rehabilitation Phase

Once the boot is removed, physiotherapy begins in earnest. The focus is:

- Restoring full ankle range of motion
- Progressive calf and peroneal muscle strengthening
- Balance and proprioception training — essential for preventing re-injury
- Gradual progression to jogging on flat surfaces

Months 3–6: Return to Sport

Sport-specific rehabilitation begins once baseline strength and proprioception targets are met. Return to full unrestricted sport — including contact sport and cutting activities — is typically achieved between four and six months, depending on the nature of the sport and the extent of the repair performed.

Your physiotherapist will guide each milestone and confirm readiness before progression. There is no fixed timeline that applies to everyone — the focus is on achieving the right functional benchmarks, not simply reaching a certain date on the calendar.

⚠ Important restrictions during the first six weeks: avoid forced plantar flexion (pointing the foot down hard) and avoid internal rotation of the foot. These positions must be avoided until the ligament has healed sufficiently. Your physiotherapist will guide you on safe movement within these limits.

Risks and Possible Complications

Arthroscopic ankle ligament repair is a well-established procedure with a strong safety record. As with all surgery, there are risks to be aware of:

- Wound infection — uncommon with arthroscopic techniques
- Sural nerve irritation — a small sensory nerve runs near the outer ankle portal; transient numbness or tingling along the outer foot is occasionally reported and usually resolves fully
- DVT (blood clot) — reduced with compression stockings and early weight-bearing



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- Re-rupture — uncommon when rehabilitation is completed in full; more likely if return to sport is rushed
 - Residual stiffness — some loss of plantarflexion range is occasionally seen, usually mild and improving with physiotherapy

Please discuss any concerns about specific risks with Dr Maritz at your consultation.

Supporting Your Recovery

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 (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.