



**DR MARK MARITZ**  
ORTHOPAEDIC SURGEON

# Midfoot Arthritis Surgery

A Patient Information Guide — Midfoot Fusion & Minimally Invasive Arthrodesis

## What is Midfoot Arthritis?

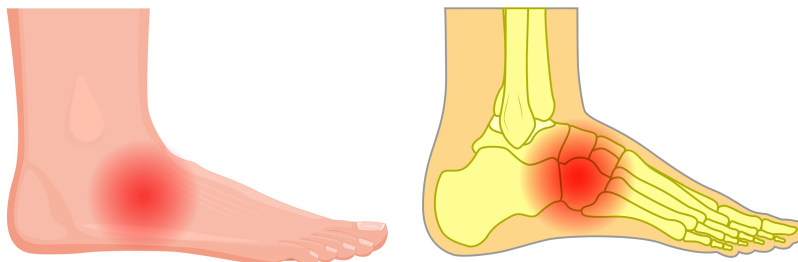
The midfoot is a complex region of the foot made up of numerous small bones and joints that work together as an intricate, interconnected system. During everyday activities such as walking and standing, these joints play a crucial role in stabilising the arch of the foot and absorbing and transmitting the forces of movement.

Arthritis develops when the protective cartilage lining these small joints is damaged or destroyed. Without this cushioning layer, the bones begin to grind directly against one another — causing pain, stiffness, and progressive deformity. The condition can arise from several causes:

- Post-traumatic arthritis — the most common cause, developing months or years after a midfoot injury such as a Lisfranc fracture-dislocation
- Degenerative (wear-and-tear) arthritis — gradual breakdown of cartilage over time, often worsening with age
- Inflammatory arthritis — conditions such as rheumatoid arthritis that cause the immune system to attack joint cartilage

Symptoms vary depending on which joints are affected and how advanced the disease is. Common experiences include aching or sharp pain across the top of the midfoot, swelling and tenderness after activity, stiffness — particularly in the morning — and, in severe cases, a progressive collapse of the foot's arch that alters the shape of the foot itself.

FOOT PAIN  
Human foot. Lateral view.



Midfoot pain — the area most commonly affected, viewed from the side



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## Non-Surgical Options

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Surgery is not the first step. Many patients with midfoot arthritis can achieve meaningful, long-term relief through a combination of non-operative measures, and Dr Maritz will always ensure these have been genuinely explored before recommending an operation.

- Footwear modification — wide, supportive shoes with a stiff sole reduce bending forces across the midfoot joints and can significantly ease day-to-day discomfort
- Custom orthotic insoles — a rigid or semi-rigid arch support offloads the arthritic joints
- Activity modification — reducing high-impact activities such as running
- Physiotherapy — strengthening the muscles that support the arch can reduce the load placed on the arthritic joints
- Anti-inflammatory medication — oral or topical NSAIDs help manage pain and swelling
- Corticosteroid injections — a guided injection into the affected joint can provide months of relief and can also serve as a useful diagnostic tool to confirm which joint is the source of pain

When these measures no longer provide adequate relief and the pain is significantly affecting your mobility, independence, or quality of life, surgical intervention becomes a very worthwhile option.

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## What Does the Surgery Involve?

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Every midfoot arthritis case is unique. The precise joints affected, the severity of the disease, and the degree of any associated deformity all influence what surgery is required. Dr Maritz tailors the procedure specifically to each individual patient.

Dr Maritz strongly favours a **minimally invasive (keyhole) approach** for midfoot fusions wherever possible, using small, precise incisions to minimise the impact on the surrounding soft tissue. This results in less post-operative pain, a lower risk of wound complications, and a faster overall recovery compared to traditional open surgery.

### Understanding Midfoot Fusion (Arthrodesis)

The principle of midfoot fusion is straightforward: if a joint is causing pain because its cartilage is gone, the solution is to eliminate the joint entirely by encouraging the two bones to grow into one solid unit. Once fused, there is no longer any movement in that joint — and therefore no more bone-on-bone pain.

#### The procedure involves three key steps:

- Joint preparation — the remnants of the damaged cartilage are carefully removed from the joint surfaces through keyhole incisions, creating a clean bone surface ready to accept new bone growth



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- Bone grafting — a small amount of bone graft is harvested from just above the ankle (a minor, well-tolerated procedure at the same sitting). This graft material is packed into the joint space to stimulate and accelerate the fusion process
- Fixation with screws — specialised screws are inserted to hold the bones together in the correct position while the fusion consolidates. These screws remain permanently in place and do not require removal in the vast majority of patients

It is important to understand that fusion does result in some permanent loss of motion in the fused joints. However, the midfoot joints that are typically fused contribute very little to the overall movement of the foot — most patients are pleasantly surprised by how little functional difference they notice, and the relief from pain is often transformative.

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## Understanding the Risks

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Dr Maritz takes every precaution to minimise risk, and strict adherence to postoperative instructions plays a critical role in preventing complications. That said, as with any major surgical procedure, complications can occasionally arise:

- Prolonged swelling — this is the most experienced side effect and should be expected. The foot can remain swollen for many months. Elevation, ice packs (20 minutes, twice daily), and physiotherapy all help manage this effectively.
- Wound complications — do not tamper with or remove your bandages; this is the most effective way to protect your wound and prevent infection. The minimally invasive approach significantly reduces wound-related risks compared to open surgery.
- Infection — uncommon and best prevented by leaving dressings undisturbed and attending all postoperative appointments promptly.
- Non-union — occasionally the fused bones may not heal together as expected. This occurs more frequently in smokers, diabetic patients, and those with poor bone quality. A further procedure may be required to address this.
- Hardware irritation — the screws used for fixation can, in a small number of cases, cause irritation once healing is complete. Screw removal is a straightforward day procedure if required.
- Nerve sensitivity — small sensory nerves around the midfoot may be affected, causing areas of numbness or tingling. This is usually temporary but may occasionally persist.
- Deep vein thrombosis (DVT) — blood clots are prevented by keeping the toes and ankle moving as instructed, and blood-thinning medication is prescribed where appropriate.



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## Your Recovery

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Recovery from midfoot fusion surgery requires patience, but Dr Maritz's minimally invasive approach means that patients are typically mobile significantly sooner than with traditional open techniques.

### Recovery at a Glance

#### Immediately after surgery

- The foot will be bandaged and placed in a moonboot — do not remove either, and keep them completely dry
- Keep the leg elevated as much as possible
- Use a knee scooter (recommended) or crutches to stay fully non-weight-bearing on the foot
- Some bleeding through the bandage is normal
- Use a waterproof shower cast cover when bathing

#### Week 2 appointment

- Bandages are removed and wounds are assessed — sutures are dissolvable and do not require removal
- You continue in the moonboot for a further 4–5 weeks

#### Weeks 3–4: Partial weight bearing begins

- Gentle weight-bearing in the moonboot begins — this is considerably earlier than with traditional open surgery
- Continue to use a knee scooter or crutches for additional support as needed

#### Week 6 appointment

- The moonboot is removed and healing is assessed
- Weaning into supportive footwear begins, with a graduated increase in activity
- Formal physiotherapy begins to restore strength, balance, and normal walking pattern
- Some swelling and discomfort is expected and normal at this point — it settles progressively as the foot becomes more active

#### Longer-term milestones

- Normal comfortable shoes: from approximately 3 months
- Return to work (desk-based): approximately 6–8 weeks
- Return to work (on your feet): 3–4 months, guided by recovery progress
- Low-impact exercise (cycling, swimming): from 3 months
- Bone fusion fully confirmed on X-ray: typically, 3 months
- Full resolution of swelling: expect 6–12 months in some patients



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Knee scooter — ideal for non-weight-bearing mobility



Moonboot — worn for approximately 6 weeks post-surgery

Knee scooters, waterproof cast covers, and elevation pillows: [www.kneescooter.co.za](http://www.kneescooter.co.za)

## Supporting Your Recovery

Fusion surgery relies on your body's own healing response to grow the bones together. The following steps are essential to support that process and achieve the best outcome:

- Do not smoke. This is critically important — smoking significantly impairs bone healing and substantially increases the risk of non-union. If you are a smoker, we strongly encourage you to stop well before surgery.
- Take Vitamin D and calcium supplements as prescribed throughout the recovery period — these are essential building blocks for bone healing.
- Maintain a nutritious, well-balanced diet with adequate protein to support tissue repair.
- Take prescribed blood-thinning medication as directed to reduce the risk of deep vein thrombosis.
- Take your prescribed pain medication regularly, particularly in the first week after surgery.
- Keep your toes moving gently inside the boot, and perform the knee and hip exercises recommended by your physiotherapist to maintain circulation and muscle tone.
- Attend all scheduled follow-up appointments

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

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



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