

CASE 1

ANKLE & SUBTALAR ARTHRITIS

Surgical Management – A Rare Case Series

Deformed malunited bimalleolar fracture ankle with ankle and sub talar arthritis



Ankle and subtalar arthritis are rare, but often disabling conditions. When conservative treatment fails, surgical intervention can restore stability, relieve pain, and improve quality of life.

Patient History

A 60-year-old female, presented with severe limping and walker dependency for 18 months following a road traffic accident. Initial X-rays revealed an ankle fracture, and surgery was advised. However, she declined surgery and underwent native oil bandaging for over six months. Despite prolonged conservative treatment, she continued to experience severe pain and difficulty walking.

Clinical Examination

- Deformity and swelling around the ankle
- Severe ankle tenderness (+++)
- Severe subtalar joint tenderness (+++)
- Approximately 90% restriction of ankle and subtalar movements
- Significant swelling (+++)
- No midfoot or distal tibia tenderness
- Hyperpigmented patches over both distal legs due to prolonged native medication use



Investigation

X-ray ankle AP lateral view shows - Malunited Bi-malleolar fracture ankle with ankle subluxation and reduced ankle/ subtalar space.

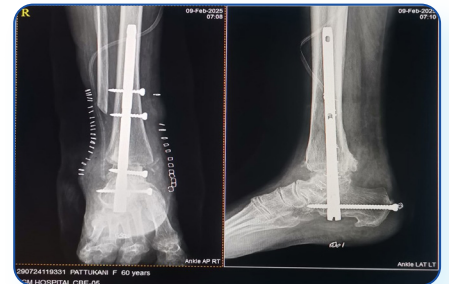


Surgical Management

The patient underwent Ankle–Subtalar Fusion using a Retrograde Intramedullary Nail Technique.

Surgical Challenges

- Difficult reduction due to malunion and chronic joint dislocation
- Extensive soft tissue release required
- Severe osteoporosis
- Poor skin quality
- Dual distal tibial and fibular incisions required for successful fusion



Post-Operative Rehabilitation



Weeks 0–2

- Active ROM of hip, knee and toes
- Quadriceps, hamstrings and gluteal isometrics
- Non-weight-bearing gait training with walker
- Limb elevation and cryotherapy
- Deep breathing exercises



Weeks 2–6

- Continue strengthening exercises
- Straight leg raises
- Hip and core strengthening
- Knee ROM exercises
- Upper-limb strengthening
- Progressive weight bearing (20%–50%)



Weeks 6–12

- Full weight bearing (50%–100%)
- Gait training
- Closed-chain strengthening
- Balance & proprioception exercises
- Stationary cycling
- Functional training (sit-to-stand and stair climbing)

Outcome



Scan to See Real Recoveries

Real Stories. Real Hope.

Three months later, patient was walking without limp, with full weight bearing & continues to do so for the last 2 years.



Key Highlights



Advanced ankle and subtalar arthritis can severely impair mobility.



Retrograde nail - ankle & subtalar fusion provides stable and durable fixation.



Structured rehabilitation is essential for optimal recovery.



Timely surgical intervention restores pain-free walking and improves quality of life.



CASE 2

RESTORING MOBILITY. RECLAIMING QUALITY OF LIFE.

18
MONTHS
FOLLOW-UP
**EXCELLENT
OUTCOME**

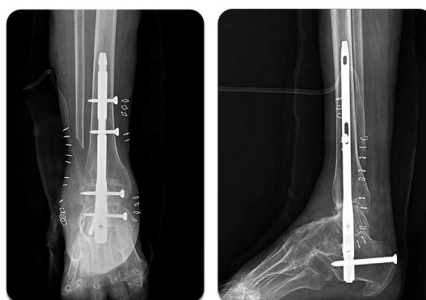
SUCCESSFUL ANKLE-SUBTALAR FUSION IN A RHEUMATOID ARTHRITIS PATIENT

Patient History

A 65-year-old female, a known case of **Rheumatoid Arthritis**, presented with progressively worsening ankle pain and limping for the past nine months. She had previously undergone **Bilateral Total Knee Replacement (TKR)** under our orthopedic team in 2016 and remained pain-free following the procedure. She was on **Disease-Modifying Anti-Rheumatic Drugs (DMARDs)**, which effectively controlled her generalized body pain and polyarthralgia. However, her ankle pain progressively worsened, significantly affecting her mobility and quality of life.

SURGICAL MANAGEMENT

The patient underwent
Ankle-Subtalar Fusion
using **Retrograde Intramedullary Nailing**.



SURGICAL CHALLENGES

Severe osteoporosis resulting in poor screw and nail purchase

Small, osteoporotic bones with significant attrition, limiting implant fixation

Technical surgical challenges due to previous bilateral Total Knee Replacement

Complex postoperative rehabilitation requiring careful progression

POST-OPERATIVE REHABILITATION

Weeks 0-2

- ✓ Active range-of-motion exercises for unaffected joints (hip, knee, and toes)
- ✓ Quadriceps, hamstrings, & gluteal isometric exercises
- ✓ Non-weight-bearing gait training with walker
- ✓ Limb elevation & cryotherapy
- ✓ Deep breathing exercises



Weeks 2-6

- ✓ Continue isometric strengthening
- ✓ Straight leg raises
- ✓ Hip & core strengthening exercises
- ✓ Knee range-of-motion exercises
- ✓ Upper-limb strengthening for walking aids
- ✓ Progressive partial weight bearing (20%-50%) over four weeks



Weeks 6-12

- ✓ Progress to full weight bearing (50%-100%) over four weeks
- ✓ Gait training
- ✓ Closed-chain strengthening exercises
- ✓ Stationary cycling
- ✓ Functional training including Sit-to-stand & stair climbing



OUTCOME

At the three-month follow-up, the patient achieved pain-free full weight bearing without a limp.

She has continued to walk independently with excellent functional outcomes for 18 months following surgery.



CONCLUSION

Combined ankle and subtalar arthritis is a rare condition, commonly caused by rheumatoid arthritis, post-traumatic injury, or advanced degeneration. Early cases respond well to **medication, physiotherapy, bracing, and activity modification**. In advanced disease, ankle-subtalar fusion provides the most reliable solution for pain relief, stability, and restored mobility.

**Emergency
Accident & Trauma Care**

