Total Ankle Replacement Post-Operative Rehabilitation Protocol

Phase 1 - Weeks 1-2:

Physiotherapy goals:

- Maintain independent ambulation
- Pain and oedema control
- Protection of operated ankle in a short-leg non-weight-bearing cast

Interventions:

- Patient discharged from hospital in a below-knee plaster of Paris backslab
- Mobilisation with crutches, non-weight-bearing for 2 weeks if straightforward TAR
- Additional procedures (calcaneal osteotomy/metatarsal osteotomy/subtalar fusion) indicate up to 6 weeks of non-weight-bearing – check op note
- Encourage limb elevation for “55 minutes in the hour”
- Attend clinic 2 weeks post-op for removal of sutures

Phase 2 - Weeks 2-8:

Physiotherapy goals:

- Protection of the healing tissues in a pneumatic walker for 2-8 weeks
- Progressive weight-bearing and normalization of gait without walking aids
- Pain and oedema control
- Commence active dorsiflexion and plantarflexion exercises without resistance

Precautions:

- No strength training/activation against resistance until week 6 post-op
- Avoid prolonged walking and standing
- Consider additional procedures patient may have had (e.g. calcaneal or metatarsal osteotomy/subtalar fusion) in context of mobilisation restrictions surgical team may have implemented

Interventions:

- Progressive weight-bearing in the pneumatic walker
- Pain and oedema control with ultrasound/cryotherapy/deep tissue massage
- Active ankle plantarflexion and dorsiflexion movements
- Gentle passive Gastroc/soleus stretching
- Activate other muscle groups as appropriate e.g. peroneals and tibialis posterior to mobilise hindfoot (unless subtalar fusion also performed).
Phase 3- 2-6 months:

Physiotherapy goals:

- Restore full range of motion (ROM) and 4-5/5 power in all muscles by 6 months
- Normal walking in standard footwear without walking aids

Interventions:

- Wean from pneumatic walker
- Gait training
- Continue oedema control and ROM exercises
- Gastroc/soleus stretches
- Strengthen foot intrinsic muscles
- Begin resisted active ROM exercises in all planes of motion from 2 months using closed and open chain exercises