

Achilles Tendon Protocol – Aircast Boot

Management of patients during immobilisation period for operative and non-operative patients.

Week	Conservative	Surgical
0 – 2	Equinus FWB cast with a wedge in the best position that opposes the tendon ends	Backslab NWB
2 – 5	Aircast boot 4 wedges FWB	Aircast boot 4 wedges FWB
5 – 7	Aircast boot 3 wedges FWB Yellow theraband exercises for soleus and gastrocnemius	Aircast boot 3 wedges FWB Yellow theraband exercises for soleus and gastrocnemius
7 – 9	Aircast boot 2 wedges FWB	Aircast boot 2 wedges FWB
9 – 10	Aircast boot 1 wedge FWB	Aircast boot 1 wedge FWB
10 – 16	Removal of boot To wear only in vulnerable environments (6/52)	Removal of boot To wear only in vulnerable environments (6/52)

FWB = full weight-bearing

NWB = non-weight bearing

PWB = partial weight-bearing

Rehabilitation guidelines after immobilisation for operative and non-operative patients

Do (Weeks 10-12 post-injury)	Do Not
Issue patient with a heel raise for shoe	NO STRETCHING FOR 1 YEAR
Warn the patient that most re-ruptures occur during this phase	
Advise the patient to avoid activities which involve extreme dorsiflexion of the ankle combined with active plantarflexion	
Advise the patient that they will not return to sports which involve running until they are 6 – 8 months post-injury.	Do not attempt running, jumping or hopping
Advise the patient on a PWB gait pattern, particularly re-educating the toe off phase of gait	
Work on range of movement of the ankle and foot, particularly length of soleus and gastrocnemius.	
Lower limb muscle strength work particularly of the plantar flexors	Do not attempt eccentric lowering exercise off a step used for tendinopathies. Do not attempt resistance plantarflexion exercises which require more than half the patient's body weight.
Proprioception exercises	
Gentle plyometric exercises	
Hydrotherapy – particularly good during this phase	
For surgical patients take care of the scar. Any sign of breakdown refer back to clinic asap.	
3 – 5 months post-injury	
Dispense with heel raise	
Continue to avoid activities of extreme dorsiflexion combined with active plantarflexion	
Aim to single leg heel raise	
Plyometric – progress for example start with 2 feet jumps (bunny hops), jogging on trampet, PWB jogging, ie leaning on table	
5 – 6 months post-injury	
Gait – start jogging on the flat	
Strength – start eccentric exercises off step	
Progress proprioceptive exercises as appropriate	
Sports specific rehab exercises	
6 – 8 months post-injury	Return the patient to competitive sports until they can; single leg heel raise; sprint with the toe-off phase of gait; until horizontal single leg hop x 3 is at least 75% of good leg and vertical hop is at least 75% of good leg.
Gait – Introduce hill running	
Introduce hopping and progress to long horizontal and vertical hops	
Return to sport as able.	