Dr. Mark Porter's physiotherapy guidelines following primary surgical repair of Achilles Tendon rupture using locking fiber-wire sutures

Day 1-10

POP slab in plantar flexion, or TA boot in Plantar flexion
Touch weight bear with crutches
Active ROM (range of motion) only as tolerable from full plantar flexion towards neutral, but not beyond neutral – very important to prevent the formation of adhesions without stretching the repair.

Weeks 2-6

TA boot adjusted by one setting per week to allow greater dorsiflexion, until the boot allows movement from full plantar flexion to neutral only (no dorsi-flexion beyond neutral)
Partial weight bearing with the boot on (up to 50%) – this is easier with the wedge shaped sole on the boot.
Active ROM work as above – full plantar flexion to neutral only
No passive stretching. NWB theraband exercises in the same ROM (no dorsiflexion beyond neutral) as tolerable

Weeks 6-8

TA boot as above, with the flat sole. Can progress to full weight bearing as tolerable and begin calf raises after they have used the thickest theraband. Calf raises are begun with weight on both sides, then single – but the patient is not allowed to passively stretch the tendon at the lowest point of the calf raise, ie. Controlled eccentric work and controlled at the bottom of the exercise.

Weeks 8-10

Can wean from the boot only when they have sufficient strength to push off during the second half of stance phase when walking (otherwise they will stretch the damaged tendon on either side of the repair)

Cross-training

Upper body weights – when able to negotiate the gym safely with no weight on the operated side
Stationary cycling – when comfortable to spin against a light resistance while seated
Deep water based training – when the wounds have healed completely (around 3 weeks post surgery)
Running – only possible when the strength and ability to hop is similar on both legs and the earliest is usually 4 months post-surgery, and more often 6 months.

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