

ACHILLES TENDON REPAIR

REHABILITATION PROTOCOL

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Sports Medicine & Physiotherapy

ACHILLES TENDON REPAIR

Achilles Tendon ruptures are commonly repaired surgically but may also be managed conservatively (non-surgical) on the advice of your surgeon. The following protocol is based on a surgically repaired tendon.

PHASE 1 — EARLY REHAB (0-3 WEEKS)

| GOALS | PRECAUTIONS | RECOMMENDED PROGRAM | CRITERIA TO PROGRESS TO NEXT PHASE (TICK WHEN COMPLETE) |
|---|---|---|---|
| Stabilise pain and oedema Circulation exercises Wound management (guided by nurse) Soft tissue management at calf and foot as well as hip and back Mobility education Maintenance of rest of body as required Protect repair site | Non-weight bearing (NWB) in cast or boot for 2-3 weeks (i.e. no foot on ground at all) Wound care DVT awareness | See Phase 1 exercise videos: Circulation exercises Knee and hip ROM ex's Hip and quad strength ex's (OKC) Toe crunches/ spreads Upper body and core training | ☐ Approval by surgeon |

Please note that the below timeframes are a guide. Your surgeon or physio may request slight variations for optimum outcome.



PHASE 2 — (3-8 WEEKS)

GOALS

- Increase weight bearing
- Move ankle gradually to plantar-grade (flat foot – Odeg DF)
- Manage wound and soft tissue around calf
- Full body balance and maintenance

PRECAUTIONS

- Orthosis
 normally set at
 30 degrees PF (4
 x heel wedges)
 start of phase 2.
- TWB only for first 2 weeks
- PWB at week 4 with increased orthosis ROM towards plantar grade
- FWB at week 6-7 with orthosis to plantar grade

RECOMMENDED PROGRAM

- Gait retraining as per weight bearing stages in precautions
- Soft tissue maintenance by physio
- Ankle mobilisation to neutral
- At 4 weeks scar mobilisation

See Phase 2 exercise videos:

- Weeks 3-6: Gentle isometrics of Achilles in boot
- Weeks 6 8: Seated calf raises, using weight of leg/ reformer/weights
- Pilates reformer for Core, pelvic and upper body strength
- Stationary bike (6 weeks)

CRITERIA TO PROGRESS TO NEXT PHASE (TICK WHEN COMPLETE)

- Surgeon and physio approval
- ☐ Able to full weight-bear in boot



PHASE 3 — (8-12 WEEKS)

GOALS

- Full ROM ankle
- Tolerance to regular shoe
- Good gait mechanics
- Good balanced body and strength
- Aim for double standing calf raise by 12 weeks

PRECAUTIONS

- No dynamic loading of Achilles in this period.
- Wean from boot slowly
- Avoid overstretching

RECOMMENDED PROGRAM

- Progression into shoe with a heel and then into a regular trainer by end of period
- Soft tissue management
 See phase 3 videos:
- Progress
 resistance using
 reformer or
 weights, aim for
 double standing
 calf raise by 12
 weeks
- Progress to swimming (no fins) and cycling (avoid loading past neutral)
- Proprioception program
- Pilates Reformer training for strength

CRITERIA TO PROGRESS TO NEXT PHASE (TICK WHEN COMPLETE)

- Surgeon and physio approval
- ☐ Transition from boot to shoe
- Normal walking pattern



PHASE 4 — (3-6 MONTHS)

| GOALS | PRECAUTIONS | RECOMMENDED | CRITERIA TO |
|---|--|---|---|
| OUNLO | THEOROTTONS | PROGRAM | PROGRESS TO NEXT PHASE (TICK WHEN COMPLETE) |
| Strength 5/5Perform single | Avoid dynamic activities | See phase 4 exercise videos: | Surgeon and physio approval |
| leg calf raise Return to run by end phase | (running, hopping, jumping) | Full lower limb strength program in gym | ☐ Single leg calf raises |
| | | Progress to single leg exercises | |
| | | Proprioception program | |
| | | Running education and program | |
| | | Controlled slow eccentrics of calf | |
| | | | |
| | | | |

PHASE 5 — (6-12 MONTHS)

| GOALS | PRECAUTIONS | RECOMMENDED PROGRAM | CRITERIA TO PROGRESS TO NEXT PHASE (TICK WHEN COMPLETE) |
|---|---|---|--|
| Return to sport/activity Restore full strength/power Resolve all pain Improve whole-body strength Improve fitness Prevent recurrence | Do not ignore significant pain or changes in strength | 1. Continue individualised strength and stretching program prescribed by your therapist 2. Cardio fitness: cycling, swimming, boxing, cross-trainer (running when allowed). 3. Plyometric exercises: (See videos) Progress through levels: L1: double leg (jumping) L2: single leg (hopping) L3: increase speed L4: increase duration 4. Running rehab (See attached) 5. Sports specific skill retraining | □ Surgeon clearance □ Strength and power >95% of non-injured leg □ No pain with daily activities, sports, during/after rehab exercises □ Full range of motion (knee to wall test) □ Pre-injury fitness/load restored (or enhanced) □ Biomechanical errors resolved |



ABBREVIATIONS:

- NWB: non-weight-bearing
- TWB: touch weight-bearing
- PWB: partial weight-bearing
- FWB: full weight-bearing
- DF: dorsiflexion
- PF: plantarflexion
- ROM: range of movement

