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Post-operative Rehabilitation Protocol
Non-Op Achilles Tendon Rupture

Weeks 1-2
- Walking boot in 30 degrees of plantarflexion
- Non weight bearing

Weeks 3-4
- Compression stocking to be worn under Bootwalker to help control swelling.
- Protected weight-bearing with crutches:
  - Week 2-3 – 25%
  - Week 3-4 – 50%
  - Week 4-5 – 75%
  - Week 5-6 – 100%
- Active plantar and dorsiflexion range of motion exercises to neutral, inversion/eversion below neutral
- Modalities to control swelling (US, IFC with ice, Acupuncture, Light /Laser therapy)
- EMS to calf musculature with seated heel raises when tolerated.
- Patients being seen 2-3 times per week depending on availability and degree of pain and swelling in the foot and ankle.
- Knee/hip exercises with no ankle involvement e.g. leg lifts from sitting, prone or side-lying
- Non-weight bearing fitness/cardio work e.g. biking with one leg, deep water running (usually not started to 3-4 week point)
- Hydrotherapy (within motion and weight-bearing limitations)
- Emphasize need of patient to use pain as guideline. If in pain back off activities and weight bearing.

Weeks 5-6
- Continue weight –bearing as tolerated
- Continue 2-4 week protocol
- Progress EMS to calf with lying calf raises on shuttle with no resistance as tolerated around week 5-6. **Please ensure that ankle does not go past neutral while doing exercises**.
- Continue with physiotherapy 2-3 times per week.
- Emphasize patient doing non-weight bearing cardio activities as tolerated.

Weeks 7-8
- Continue physiotherapy 2 times a week
- Continue with modalities for swelling as needed.
- Continue with EMS on calf with strengthening exercises. **Do not go past neutral ankle position.**
- Remove heel lift if had 2- 2cm lift take 1 out at a time over 2-3 day period)
- Weight – bearing as tolerated, usually 100% weight bearing in boot walker at this time.
- Active assisted dorsiflexion stretching, slowly initially with a belt in sitting
- Graduated resistance exercises (open and closed kinetic chain as well as functional activities) – start with Theraband tubing exercises
- **With weigthed resisted exercises do not go past neutral ankle position**.
- Gait retraining now that 100% weight bearing
- Fitness/cardio to include weight –bearing as tolerated e.g. biking
- Hydrotherapy

Weeks 9-12
** Ensure patient understands that tendon is still very vulnerable and patients need to be diligent with activities of ADL and exercises. Any sudden loading of the Achilles (eg Trip. Step up stairs etc.) may result in a re rupture**

- Wean off boot (usually over 2-5 day process – varies per patient)
- Wear Achillotrain Pro Compression ankle brace to provide extra stability and swelling control once Bootwalker removed.
- Return to crutches/cane as necessary and gradually wean off
- Continue to progress range of motion, strength, proprioception exercises
- Add exercises such as stationary bicycle, elliptical, walking on treadmill as patient tolerates.
- Add wobble board activities – progress from seated to supported standing to standing as tolerated.
- Add calf stretches in standing
- Add double heel raises and progress to single heel raises when tolerated. **Do not allow ankle to go past neutral position.**

Continue physiotherapy 1-2 times a week depending on how independent patient is at doing exercises and access they have to exercise equipment.12-16 weeks

- Continue to progress range of motion, strength, and proprioception exercises
- Retrain strength, power, endurance
  Ensure patient understands that tendon is still very vulnerable and patients need to be diligent with activities of ADL and exercises.

Weeks 12+
- Increase dynamic weight bearing exercise, include plyometric training Sport specific retaining

6 months return to normal activities