Salina Regional Orthopedic Clinic
Salina Regional Health Center

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PHYSICAL THERAPY PROTOCOL ACHILLES TENDON REPAIR

Procedure

Date of Surgery: _____ R L B/L Achilles tendon Repair Percutaneous Repair (PARS)
Open Achilles Repair w/ Tendon Augmentation

Additional Procedures: _____

Plan

Physical Therapy for R L B/L Lower Extremity 1-2x per Week x 8 Weeks
*Rehab appointments begin 2 weeks after surgery

General Guidelines

Please read and follow guidelines below. Progression is both criteria-based and patient specific. Phases and time frames are designed to give the clinician a general sense of progression. Phases and time frames are designed to give the clinician a general sense of progression.
Follow physician's modifications as prescribed

Post – Operative Phase I (Weeks 2-6)

Rehab appointments are 2x per week
Emphasize appropriate crutch use and gait training
Emphasize patient compliance with weight bearing status
Goals:

- Protection of the surgically repaired tendon
- Wound healing

Precautions:

- Continuous use of the boot in locked plantarflexion (20-30°)
- Touchdown weight bearing (TDWB) using the axillary crutches
- Keep the incision dry
- Watch for signs of infection
- Avoid long periods of dependent positioning of the foot during the first week to assist in wound healing.

Cardiovascular Exercise

- Upper Body Ergometer (UBE) circuit training

Treatment Recommendations:

- **Post-operative week 2-3:** tall walking boot locked at 20-30° PF (2 heel lifts), toe touch weight bearing (TTWB) using the axillary crutches and boot, no active dorsiflexion, sleep in boot
- **Post-operative week 3-4:** boot locked at 10deg PF, TTWB using the axillary crutches and boot, sleep in boot
- **Post-operative week 4-6:** If patient can reach neutral PF/DF comfortably, then neutral boot with 1-2 ¼ inch heel lifts, progress to WBAT (based on pain, swelling and wound appearance) using the axillary crutches and boot, limit active dorsiflexion to neutral sleep in boot swelling and wound appearance)

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using the axillary crutches and boot, limit active dorsiflexion to neutral sleep in boot using the axillary crutches and boot, limit active dorsiflexion to neutral sleep in boot

Suggested Therapeutic Exercise

- Ankle range of motion (ROM) with respect to precautions (starting after week 4)
- Pain-free isometric ankle inversion, eversion, dorsiflexion and sub-max plantarflexion
- Open chain hip and core strengthening

Minimum Criteria for Advancement

- Six weeks post-operatively
- Pain-free active dorsiflexion to 0°
- No wound complications. If wound complications occur, consult with a physician

Post - Operative Phase II (weeks 8-16)

Rehab appointments are 1-2x per week

Goals:

- Normalize gait on level surfaces without boot or heel lift
- Single leg stand with good control for 10 seconds
- Active ROM between 5° of dorsiflexion and 40° of plantarflexion

Precautions:

- Slowly wean from use of the boot: Begin by using 1-2 ¼ inch heel lifts in tennis shoes for short distances on level surfaces then gradually remove the heel lifts during the 6th week.
- Avoid over-stressing the repair (avoid large movements in the sagittal plane; any forceful plantarflexion while in a dorsiflexed position; aggressive passive ROM; and impact activities)

Cardiovascular Exercise

- Upper Body Ergometer (UBE) circuit training

Treatment Recommendations:

- Frontal and sagittal plane stepping drills (side step, cross-over step, grapevine step)
- Active ankle ROM
- Gentle gastroc/soleus stretching
- Static balance exercises (begin in 2 foot stand, then 2 foot stand on balance board or narrow base of support and gradually progress to single leg stand)
- 2 foot standing nose touches
- Ankle strengthening with resistive tubing
- Low velocity and partial ROM for functional movements (squat, step back, lunge)
- Hip and core strengthening
- Pool exercises if the wound is completely healed

Minimum Criteria for Advancement:

- Normal gait mechanics without the boot
- Squat to 30° knee flexion without weight shift
- Single leg stand with good control for 10 seconds
- Active ROM between 5° of dorsiflexion and 40° of plantarflexion

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Post – Operative Phase III

Rehab appointments are 1-2x per week

Goals:

- Normalize gait on all surfaces without boot or heel lift
- Single leg stand with good control for 10 seconds
- Active ROM between 15° of dorsiflexion and 50° of plantarflexion
- Good control and no pain with functional movements, including step up/down, squat and lunges

Precautions:

- Avoid forceful impact activities
- Do not perform exercises that create movement compensations

Treatment Recommendations:

- Frontal and transverse plane agility drills (progress from low velocity to high, then gradually adding in sagittal plane drills)
- Active ankle ROM
- Gastroc/soleus stretching
- Multi-plane proprioceptive exercises – single leg stand
- 1 foot standing nose touches
- Ankle strengthening – concentric and eccentric gastroc strengthening
- Functional movements (squat, step back, lunge)
- Hip and core strengthening

Cardiovascular Exercise

- Stationary bike, Stair Master, swimming

Minimum Criteria for Advancement:

- Normal gait mechanics without the boot on all surfaces
- Squat and lunge to 70° knee flexion without weight shift
- Single leg stand with good control for 10 seconds
- Active ROM between 15° of dorsiflexion and 50° of plantarflexion

Post – Operative Phase IV (Usually around 4 months)

Rehab appointments are 1x per week
Emphasize return to function/sport

Goals:

- Good control and no pain with sport/work specific movements, including impact

Precautions:

- Post-activity soreness should resolve within 24 hours
- Avoid post-activity swelling
- Avoid running with a limp

Treatment Recommendations:

- Impact control exercises beginning 2 feet to 2 feet, progressing from 1 foot to other and then 1 foot to same foot

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- Movement control exercise beginning with low velocity, single plane activities and progressing to higher velocity, multi-plane activities
- Sport/work specific balance and proprioceptive drills
- Hip and core strengthening
- Stretching for patient specific muscle imbalances

Cardiovascular Exercise

- Replicate sport/work specific energy demands

Criteria for Discharge

- Dynamic neuromuscular control with multi-plane activities, without pain or swelling