ACHILLES TENDON REPAIR
PROTOCOL

Philosophy

The following is an outline of the post-operative rehabilitation program for Achilles tendon repair utilized by Dr. Junkin. This protocol is to be utilized as a guideline. There will always be individual patient differences regarding progression and/or tolerance of specific activities.

Progression through the protocol will depend on successful accomplishments of set milestones as assessed by the physician and the physical therapist’s confidence level. The therapist and patient must constantly be aware of changes in condition, including but not limited to signs and symptoms of irritation, joint pain, and gait deviation. The patient’s home exercise program is of utmost importance and should be monitored and emphasized.

Remember, rehabilitation is nothing more than creating the optimal environment for the natural process of healing to occur.

If you have any questions regarding this protocol, or the rehabilitation status, please contact the office.
GENERAL PRECAUTIONS

- Avoid forceful active and passive range of motion of the Achilles for 10 - 12 weeks.
- Carefully monitor the tendon and incisions for mobility and signs of scar tissue formation. Regular soft tissue treatments (i.e. scar mobilization and friction massage) to decrease fibrosis.
- All exercises should be carefully observed for any signs of compensation or guarding.
- No running, jumping, or ballistic activities for 6 months.
- Aerobic and general conditioning throughout the rehabilitation process.

WEEKS 0 to 4

PRECAUTIONS:
- Nonweightbearing cast

EXERCISES:
- Toe curls
- Toe spreads
- SLR
- Knee flexion / extension

MODALITIES:
- E-stim/biofeedback as needed
- Soft tissue treatments
- Cryotherapy

GOALS OF PHASE:
- Control pain, swelling, and inflammation
- Report signs of signs of DVT (swelling, pain, palpable cords, erythematous streaks)

WEEKS 4 to 6

WEIGHT BEARING:
- Advance to full weightbearing in boot with heel lifts
- Remove one level of heel lifts every 2 weeks

EXERCISES:
- Gentle PROM & AROM from 30° of plantar flexion to 0° extension
- Instruct patient to perform the above AROM at home 4-5 times per day
- Isometrics of uninvolved muscles, light active dorsiflexion of the ankle until gentle stretch of Achilles
- Slowly increase the intensity and ranges of isometrics of Achilles
• Isometrics of uninvolved muscles
• Light active dorsiflexion of the ankle until gentle stretch of Achilles
• Slowly increase the intensity and ranges of isometrics of Achilles as tolerated

**MODALITIES:**
• Proprioception exercises
• Intrinsic muscle strengthening
• Proprioceptive Neuromuscular Facilitation (PNF) – (not to Achilles)
• Continue soft tissue treatments

**GOALS OF PHASE:**
• Slow progression of ROM
• Soft tissue management
• Isometric strengthening

**WEEKS 6 to 12**

**EXERCISES:**
• Gentle PROM & AROM from 30° of plantar flexion to 10° extension
• Isometrics of uninvolved muscles, active dorsiflexion of the ankle until gentle stretch of Achilles.
• Increase the intensity and ranges of isometrics of Achilles
• Isometrics of uninvolved muscles
• Active dorsiflexion of the ankle until stretch of Achilles
• Increase the intensity and ranges of isometrics of Achilles as tolerated
• Stationary cycling with heel push only
• At 8 weeks begin and gradually increase active / resistive exercises of the Achilles (i.e. submaximal isometrics, cautious isotonics, Theraband)
• Manual full passive range of motion of the Achilles--nothing forceful
• At 8 to 10 weeks progress to cycling in shoe, swimming

**MODALITIES:**
• Continue proprioceptive exercises, soft tissue treatments
MONTHS 3 to 6

- ROM as tolerated
- Wean off heel lifts (if not already)
- Closed chain exercises: controlled squats, lunges, bilateral calf raise (progress to unilateral), toe raises, controlled slow eccentrics vs. body weight
- Cycling, VersaClimber, rowing machine, Nordic Track (gradually)
- Unless excessive fibrosis present, should be discharged into a home program

MONTHS 6 to 8

- Progress training jogging / running, jumping and eccentric loading exercises, noncompetitive sporting activities, sports-simulated exercises

MONTHS 8 to 9

- Return to physically demanding sport and/or work