Accelerated Protocol
Minimally Invasive Achilles Repair Rehab

First 2 Weeks After Surgery (Follow-up at 1 week and 2 weeks after surgery with Dr. Varacallo)

Goals
- Protect repair
- Reduce of swelling to allow for soft tissue healing

Weight bearing
- Non-weight bearing with crutches and/or scooter

Brace
- Splint in plantarflexion
- **Follow-up 1 week after surgery and change to BOOT with ankle in plantarflexion**
- **2 total weeks of Non Weight Bearing**

Exercises
- ELEVATE, ELEVATE, ELEVATE! "Toes above the nose"

Weeks 2-4 (Follow-up at 4 weeks after surgery with Dr. Varacallo)

Goals
- Initiate formal physical therapy (2 times per week)
- Begin graduated weight bearing
- Active dorsiflexion up to neutral

Weight bearing
- Initiate PWB in boot with 2 crutches then go down to 1 crutch and finally no crutches in the boot

Brace
- Tall CAM boot with FOUR ½" heel wedges. Remove 1 wedge every 5-7 days as able. Should be no wedges by Week 6 follow-up

Treatment
- Gentle scar massage and cryotherapy

Exercises
- Active dorsiflexion to neutral only
- No active plantar flexion
- Pain-free ankle isometrics: inversion, eversion, dorsiflexion and sub-max plantar flexion
- Open-chain hip and core strengthening in boot

Week 4 – 6 (Follow-up at 6 weeks after surgery with Dr. Varacallo)

Goals
- Regain ankle ROM (active ROM between 5^0 DF and 40^0 PF)
- May sleep out of boot if comfortable now

Weight bearing
- Full

Brace
- Boot at all times with 1inch heel lift. Can remove for hygiene and exercises

Precautions
- Avoid overstressing the repair (forceful movements in the sagittal plane, forceful plantar flexion while in a dorsiflexed position, aggressive PROM)

Treatment
- Gentle cross fiber massage to achilles tendon to release adhesion between tendon and peritendon
- Cryotherapy and other modalities add PRN

Exercises
- Active ankle eversion/inversion
- Passive dorsiflexion both with knee in extension and flexed to 35 - 40^0 until gentle stretch on achilles
- Begin standing calf stretch at 5 weeks (knee flexed and extended)
- Continue eversion, inversion and plantar flexion isometrics with resistance bands
- Initiate balance exercises (double leg wide base ➔ narrow base)
- Initiate stationary bike with minimal resistance
- Initiate pool exercise in total buoyancy with floatation device if wound is fully healed
- Hip and core strengthening

7 – 12 weeks

Goals
- **Normalize gait on level surface without boot or heel lift**
- **Active ROM between 15^0 DF and 50^0 PF**
- **Good control and no pain with functional movements**

Brace
- Supportive athletic shoes with ankle brace

Precautions
- Avoid high impact activity

Exercises
- Full PROM/AROM all planes. Avoid forceful dorsiflexion
- Progress standing calf stretch
- Initiate double leg toe raise and advance weight as tolerated
- Initiate functional movement (squat, steps ups, lunges in all planes)
- Advance balance training to wobble board and single leg activity
- Initiate frontal and transverse plane agility drills (progress from low velocity to high and then gradually add in sagittal plane drills)
- Progress cardiovascular training
    - Stationary bike, stairmaster, swimming, chest level water exercise, treadmill walking

3 – 6 months

Goals

- **Ankle strengthening**
- **Regain normal gait**
- **Initiate running**

Precautions

- Normal shoes.

Exercises

- Progress double leg toe raises to body weight (1.5 times body weight athlete)
- Advance to single leg toe raises as tolerated
- Running progression at 5 months
    - Trampoline jogging ➔ treadmill ➔ outdoor running

6 – 9 months

Goals

- **Return to sport/job specific training**

Precautions

- Post-activity soreness should resolve after 24 hours
- Avoid excessive activity related swelling and/or pain

Exercises

- Progress running to sprinting
- Initiate agility: figure of 8 and cutting drills 6 months
- Jumping progression 6 – 7 months
- Sport/job specific training
- Full return to sport/strenuous work 8 – 9 months