Dr. Pathik Shah
Sports, Revision Sports and Regenerative Sports Orthopaedic Surgeon
DNB Ortho (Mumbai), MNAMS (New Delhi), MBBS
AOSSM Sports Surgery Fellowship (California, USA),
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Diploma in Football medicine (FIFA)

DIAGNOSIS: ACHILLES TEAR- NON-OPERATIVE

PHASE 1 (0-2 WEEKS)

GOALS:
Pain and edema control
Protect from accidental injury
Minimize gluteus, quadriceps and hamstring atrophy
Learn to manage proper weight bearing with an assistive device

EXERCISES/RESTRICTIONS:
Non-weight bearing in plantarflexion splint with crutches
Elevation
Strengthening: Quad sets, Hamstring stretching, Straight leg raise, Hip abduction exercises
Gait training

PHASE 2 (2-8 WEEKS)

GOALS:
Pain and edema control
Tissue healing, avoid over elongation of Achilles
Restore ankle plantarflexion

EXERCISES/RESTRICTIONS:
If in pain, back off activities & weight bearing
Avoid PROM ankle DF past neutral during 2 – 8 weeks stage
Progressive weight bearing with crutches and walking boot with heel lifts to 40 degrees plantar flexion

- Week 2-3: 25%
- Week 3-4: 50%
- Week 4-5: 75%
- Week 5-6: 100%
- Gait training in boot at 6 weeks.

Upper body ergometer Strengthening
Modalities to control swelling: US, IFC with ice
BFR NMES: calf muscle with strengthening, not past neutral ankle position.
ROM: Active plantar & dorsiflexion ROM exercises to neutral, inversion/eversion below neutral

PHASE 2 (8-12 WEEKS POST INJURY)

GOALS:
Normalize gait and wean boot, regain full range of motion
Safely progress strengthening
Promote proper movement patterns

Avoid post exercise pain/swelling

EXERCISES/RESTRICTIONS:

Full weight bearing as tolerated in boot without heel wedges and wean boot over 2-5 days
Gentle stretching all muscle groups: prone quad stretch, standing quad stretch, kneeling hip flexor stretch
Stationary bike, elliptical & walking on treadmill
Balance board activities with block to prevent DF past neutral
Add gentle calf stretches in standing (not past neutral)
Double-heel raises and progress to single-heel raises (not past neutral)
Begin loaded lunges/squats/step ups, maintaining neutral ankle position as much as possible
Educate the patient to wear shoes at all times, even indoors

PHASE 3 (3-6 MONTHS)

GOALS:

Safely progress strengthening
Promote proper movement patterns
Avoid post exercise pain/swelling
Patient has regained 80 – 100% strength
Able to complete single-leg heel raises
Displays proper gait mechanics
Good movement quality with jumping, hopping, jogging

EXERCISES/RESTRICTIONS:

Avoid lunges, squats and any exercise that places excessive stretch on tendon until 6 months
16+ weeks: Increase dynamic weight-bearing exercises (skipping, jogging & weight training) if they can do 25 single-heel raises
6 – 9 months: Return to normal sporting activities that do not involve contact or sprinting, cutting, jumping if patient has regained 80% strength
12 months: Return to sports that involved running/jumping as directed by medical team if the patient has regained 100% strength.

PHASE 4 (>6 MONTHS)

GOALS:

Continue strengthening and proprioceptive exercises
Safely initiate sport specific training program
Symmetrical performance with sport specific drills
Safely progress to full sport

EXERCISES/RESTRICTIONS:

Lunges, progressive strengthening and endurance
Interval running program
Return to Running Program
Agility and Plyometric Program

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Duration: 6 months