



MEDIAL-LATERAL ANKLE STABILIZATION WITH OSTEOTOMY REHAB PROTOCOL

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IMMEDIATE POST-OPERATIVE PHASE (0-4 WEEKS)

PRECAUTIONS:

- NO NSAIDS
- Boot walker or hinged walker
- NWB for 4-6 weeks
- Avoid end-range of ROM
- Stay elevated for ROM
- PF/DF only
- Do not overload the graft
- Range of motion in Sagittal plane only until 6 weeks
- May progress activities within phase if able to perform prior activities pain free

GOALS:

- Edema control
- Pain control
- Early motion
- Protection of the cartilage
- Prevent contractures
- ROM: DF: 10-15 degrees, PF: 45 degrees (or within 80% of pre-op)
- Toe touch weight bearing (TTWB) at 4 weeks (if cleared by MD)
- Desensitization

EXERCISES/ACTIVITIES:

Pain/Edema Control

- Elevation
- Manual lymphatic drainage/soft tissue mobilization
- High volt E-stim – High volt E-stim/SportsTX unit for home use
- Cool pack (caution regarding macerated wound)
- Rehab juice

Range of Motion, Motor Recruitment, & Strength

- Grade I – II subtalar joint neuro re-education mobs
- General supervised ROM in sagittal plane

- Toe crunches
- Stationary bike, no resistance
- Active assisted range of motion with sagittal plane
- Quad, hamstring, calf sets with SLF
- Whirlpool as soon as wound heals

Core Training

- Core stabilization

PHYSICIAN NOTIFICATION:

The physician will be notified if the patient:

1. Fails to meet goals for each phase
2. Presents with persistent joint effusion
3. Exhibits chronic regional pain syndrome symptoms
4. Drainage and/or wound breakdown
5. Infection
6. Deformity
7. Exhibits continued difficulty with ambulation
8. Develops other complications associated with osteotomy and fracture healing

NOTES:

- Do not progress until cleared by MD (satisfactory radiographs)
- MD visits: 7-10 days to remove sutures/staples and 3-4 weeks for X-Rays
- Large defect repair will heal in 6 weeks
- Small defect repair will heal in 4 weeks
- Medial osteotomy – protect posterior tibialis sheath
- Lateral osteotomy – protect peroneal tendon sheath and monitor peroneal nerve

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MEDIAL-LATERAL ANKLE STABILIZATION WITH OSTEOTOMY REHAB PROTOCOL

CONTINUED

LATE POST-OPERATIVE PHASE (4-8 WEEKS)

Progression to this phase after satisfactory radiographs (MD approval)

PRECAUTIONS:

- NO NSAIDS
- No impact activities
- Decrease intensity if onset of pain or swelling
- May progress activities within phase if able to perform prior activities pain free
- Progressive weight bearing status per MD
- Ankle sleeve for support and kinesthetic feedback per MD recommendation
- Sagittal plane activities only until 6 weeks
- Begin pool program contingent on MD recommendation

GOALS:

- Full WB
- Full ROM
- No pain
- Normalized gait pattern
- Wean off crutches for slow gain velocity
- No swelling
- Adequate proprioception

EXERCISES/ACTIVITIES:

Pain/Edema Control

- Appropriate modalities

Range of Motion, Motor Recruitment, & Strength

- Gentle manual PNF
- Neuro re-education
- Leg press
- Toe raises
- BAPS board in sitting until 6 weeks
- Calf strengthening

General Conditioning

- Core strengthening
- General conditioning

- Uninvolved leg conditioning

After 6 weeks progress to:

- Stationary bike, low resistance
- Tandem stance challenges sagittal plane
- Thera-tubing all planes
- Unloaded TM
- Pool

EARLY REHABILITATION PHASE (8-12 WEEKS)

PRECAUTIONS:

- NO NSAIDS
- Decrease intensity if onset of pain or swelling
- May progress activities within phase if able to perform prior activities pain free

GOALS:

- Normalized gait pattern
- Improved proprioception > or = 50% of contra limb
- Optimize subtalar joint accessory motion

EXERCISES/ACTIVITIES:

Pain/Edema Control

- Appropriate modalities
- Soft tissue mobilization

Range of Motion, Motor Recruitment, & Strength

- Joint mobilization to optimize ankle/subtalar joint biomechanics
- Lateral stability training (side steps, carioca, etc.)
- Squats - level surface
- Uneven surface balance training/single leg stance

Core Training

- Conditioning - bike, treadmill

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MEDIAL-LATERAL ANKLE STABILIZATION WITH OSTEOTOMY REHAB PROTOCOL

CONTINUED

(increasing load), upper body ergometer (arm bike)

- Core strengthening

LATE REHABILITATION PHASE (12-16 WEEKS)

PRECAUTIONS:

- NO NSAIDS
- Decrease intensity if onset of pain or swelling
- May progress activities within phase if able to perform prior activities pain free

GOALS:

- Normalized gait pattern
- Improved proprioception > or = 75% of contra limb
- Optimize subtalar joint accessory motion

EXERCISES/ACTIVITIES:

Pain/Edema Control

- Appropriate modalities

Range of Motion, Motor Recruitment, & Strength

- Lateral stability training (side steps, carioca, etc.)
- Bilateral body weight
- Squats - level surface
- Uneven surface balance training/SLS
- Joint mobilization to optimize ankle/subtalar joint biomechanics
- Soft tissue mobilization

General Conditioning

- Conditioning - bike, treadmill, upper body ergometer (arm bike), rowing machine
- Core strengthening

SPORTS SPECIFIC PHASE (4-8 MONTHS)

Return to competitive sports at 6-8 months

PRECAUTIONS:

- NO NSAIDS UNTIL APPROVED BY MD
- Initiate sport specific activities after MD verified cartilage healing
- May progress activities within phase if able to perform prior activities pain free

GOALS:

- Increase strength
- Progress cardiovascular training
- 90-95% of ankle star excursion test
- Introduction of sport specific skills
- Normalization of gastrocnemius, hamstring, hip flexor, and hip adductors flexibility
- Return to sport and/or unrestricted activity

ACTIVITIES:

- Stair stepper
- Running at 6 months
- Jumping (sports specific)
- Advanced balance drills
- Sports cord activities
- Fitter/slide board