

ANKLE OCD (OSTEOCHONDRITIS DISSECANS) POST-OPERATIVE REHABILITATION GUIDELINES FOR DRILLING/ EXCISION SURGERY

General notes:

"As tolerated" should be understood to include with safety for the reconstruction/repair; pain, limp, swelling, or other undesirable factors are indicators that you are doing too much too soon. If any of these should occur, decrease activity level, ice and elevate the leg.

Ice should be applied to the knee for 15-20 minutes following each exercise, therapy, or training session.

Exercises provided are examples that are appropriate for the patient at each phase of recovery. Please feel free to adapt exercises as long as they remain within guidelines.

Return to sport based on provider team (physician, physician assistant, athletic trainer, therapist) input and appropriate testing. All times and exercises are to serve as guidelines. Actual progress may be faster or slower, depending on each individual patient, as agreed upon by the patient and his/her team of providers.

If you have questions regarding the surgical procedure, or the appropriateness of an exercise, please contact Dr. Nissen's office or the physical therapy department.

Phase 1: Acute Post-Operative Phase (0 – 6 weeks)

WWB Status – NWB with crutches for three weeks

- PWB with two crutches and progress to one crutch with normal gait pattern from weeks four to six

Exercise (All can be included in HEP)

- Bike – NO RESISTANCE
- Gastroc/Soleus towel stretching
- AROM
- Isometric ankle 4-way
- Progress to isotonic with t-band around three weeks (must be pain free)
- Lower extremity in NWB
- Clamshells, 4-way SLR
- Core training
- Lower extremity in PWB (starting minimum four weeks, must be pain free)
- Start seated and progress to supported standing
 - Weight shifts
 - Seated BAPS
 - Towel curls

Manual

- PROM
- Soft tissue and scar mobilizations
- Joint mobilizations

Modalities as needed

- Ice, Compression, Elevation (should also be included in HEP)
- E-Stim

Criteria for progression - Usually time-based

- Approx. six week
- Progress if PT eval clears them
- No pain at rest

- Minimal swelling
- Minimum of neutral DF ROM

Phase 2: Progressive Weightbearing and Strengthening (6-8 weeks)

WB Status – Progress WBAT to FWB as gait becomes non-antalgic

- MUST have no increased pain with walking
- MUST have non-antalgic gait to progress to FWB
- MUST resume crutches if increases in edema occur

Exercise

- Endurance Training
- Progress Bike with gradual increase in resistance
- Motion and Stretching
- Progress towel calf stretching to standing stretching
- Progress BAPS to PWB standing and then FWB
- Educate on and initiate self mobilizations (i.e. ankle rocking)
- Strengthening
 - Isotonic Ankle 4-way with progressive increase in TheraBand resistance
 - Continue with core and proximal (hip) strengthening
 - Sports cord 4-way standing on the uninvolved
 - Bridging
 - Squats
 - Resisted retro-, forward, and lateral walking (non-antalgic gait)

- Proprioception (begin DLS, then progress to TTWB support from uninvolved leg and finally SLS)

- Weight shifts
- Rebounder 3-way
- Hip dips, bumps, twists
- UE reaches

Manual

- PROM

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- Progress Joint Mobilizations
- Soft tissue and scar mobilizations

Modalities (as needed) Criteria for progression

- Minimum of eight weeks
- Minimal swelling/edema
- Non-antalgic gait in FWB without assistive device
- Radiographic evidence of healing
- MD follow up at approximately eight weeks

Phase 3: FWB with Progressive Strengthening (8 weeks to 12 weeks)

OWB Status – FWB with non-antalgic gait

Exercise

- Endurance Training
- Progress from bike to elliptical
- Motion and Stretching
- General LE dynamic warm up
- Continue with standing BAPS and standing slant board stretches
- Strengthening
 - Continued Ankle 4-way with progressive increase in resistance
 - Heel raises with progression from bilateral to unilateral
 - Continue with core and proximal (hip) strengthening
 - Progress with FWB/CKC exercises
 - Sports cord 4-way standing on the involved
 - Step up/downs, lunges, squats, etc.
 - Progressive resistance
- Gait/Functional Training
 - Retro treadmill walking with progression to forward walking
 - Shuffle walking and/or carioca
- Proprioception (Progress from DLS to TTWB on uninvolved to SLS and uneven surface)
 - Rebounder 3-way
 - Hip dips, bumps, twists
 - UE reaches
 - Sports cord 4-way standing on the involved
 - LE reaches (Star reaching/excursion)
 - External perturbation training

Manual

- PROM
- Progress Joint mobilizations
- Soft tissue and scar mobilizations

Criteria for progression

- Continues to demonstrate no edema
- 80% of limb length during the Star Excursion Balance Test

- The norm is 94%. Therefore, patient should be at 80% to get to phase four and then pass the test once in phase four

- Ankle ROM >95% of uninvolved
- Radiographic evidence of healing

Phase 4: Advances strengthening and Functional Training (12–20 weeks)

Exercise

- Endurance Training
- Elliptical
- Motion and Stretching
- General LE dynamic warm up
- Static stretching as needed
- Self-directed mobilization for DF
- Strengthening
- Progress exercise from previous phases
- Functional Training
 - Drilling/excision – three months
 - ACI (not common) – six months
- Treadmill progressive jogging/running training
- Ladder drills
- Cutting
- Progressive jump training (stationary, forward, lateral, rotatory, vertical, etc.)
 - Progress from double leg to single leg
- Resisted jogging or sled training
- Proprioception
- Progress exercises from previous phase to unstable surfaces (Airex and/or BOSU)
- External perturbation training

Manual

- Continue with PROM, joint mobilizations, soft tissue and scar mobilizations as needed

Criteria for return to play

- Drilling
- Minimum four months
- ACI
 - Low impact – minimum eight months
 - High impact – minimum twelve months
- Continues to demonstrate no edema
- Full strength and ROM
- Passing ELITE® Lower Extremity Functional test
- Double leg and single hopping (including triple jump) is pain free
- Passing Star Excursion Balance Test (96%)
- Radiographic evidence of healing