

**Ankle:  
Chondral/Osteochondral Defect Repair  
Protocol**

**Preoperative**

**Goals:**

- 1. Able to ambulate safely with crutches/walker NWB and PWB including varied surfaces and stairs**

Treatment:

- Crutch training to include flat and varied surfaces and stairs NWB and PWB.

**Postoperative Week 1-2**

**Goal:**

- 1. Protect the surgical Ankle**

Treatment:

- NWB. Stay in splint/brace

**Postoperative Week 2 – 4**

**Goal:**

- 1. Protect surgical ankle**
- 2. Manage pain**
- 3. Begin Range of Motion**
- 4. Control post operative pain/swelling**

Treatment:

- Patient to be progressed to PWB (up to 30% body weight) if a small lesion (per MD's recommendations). Patient to remain NWB for 6 weeks if larger lesion
- PROM, Active Assist ROM and Active ROM Plantar and Dorsiflexion
- Initiate isometrics:
  - o Plantar and Dorsiflexors
  - o Quadriceps and hamstrings
  - o Gluts
- Initiate Pool exercises
- Open chain therapeutic exercises for the knee and hip all planes
- Modalities as need for pain. Can include cold packs, ES, indirect soft tissue work.

**Postoperative Week 5 – 6**

**Goals:**

- 1. Progress ROM and Exercises**
- 2. Control any post operative pain/swelling**

Treatment:

- Progress to FWB for smaller lesions. Patient will continue NWB for larger lesions.
- Add cycling with 0 to minimal resistance
- Progress Pool exercises
- Add toe flexor and extensors into workout
  - o Towel crunching
  - o Marble pick ups

- Continue ROM program passive, a/a, and active
- Modalities as need for pain. Can include cold packs, ES, indirect soft tissue work.

### **Postoperative Week 7 – 8**

#### **Goals:**

- 1. Full ROM Plantar and Dorsiflexion**
- 2. Initiate Inversion and Eversion**
- 3. Able to ambulate FWB with assistive device for normalized gait pattern**
- 4. control post operative pain/swelling**

#### Treatment:

- continue Passive, Active Assist and Active ROM
- Add inversion and eversion passive/active assist and active ROM
- Ambulation to FWB with assistive device
- Increase time and resistance on exercise bike
- Progress resistance exercises for the knee and hip
- Modalities as need for pain. Can include cold packs, ES, indirect soft tissue work, light mobilizations

### **Postoperative Week 8-10**

#### **Goals:**

- 1. Full ROM**
- 2. Ambulating FWB with decreased use of assistive device to discharge of assistive device**
- 3. Begin Eccentric training and stretching programs**
- 4. control post operative pain/swelling**
- 5. Incorporate trunk and UE training**

#### Treatment:

- Progress ROM therapeutic exercises
- Training to ambulate with decreased assistive devices
  - o Walker to crutch to cane to no assistive device
- Increase resistances on exercise bike
- Stairs, Stairmaster. Start with smaller heights and build up from there
- Leg press/total gym. Progress from minimal weight to moderate weight as tolerated.
- Treadmill
- Modalities as need for pain. Can include cold packs, ES, indirect soft tissue work.
- Trunk and UE resistance and endurance training

### **Postoperative Week 11-12**

#### **Goal**

- 1. Able to ambulate at normal functional speeds with good pattern**
- 2. Fair proprioception**
- 3. control post operative pain/swelling**
- 4. Progress trunk and UE training**

#### Treatment:

- Progress closed chain exercises
- Proprioceptive exercises

- Single leg stance (SLS) on flat ground
- SLS on balance pad
- SLS using rebounder
- increase speeds on treadmill **NO RUNNING OR JOGGING!!**
  - Okay to add 1-3% incline as tolerated
- Progress stretching program
- Incorporate Eliptical
- Concentric and eccentric training of the Dorsiflexors/Plantarflexors/Evertors/Invertors
- Modalities as need for pain. Can include cold packs, ES, indirect soft tissue work.
- Trunk and UE resistance and endurance training

### **Postoperative Week 13-20**

#### **Goal:**

- 1. Restoration of non-impacting function**
- 2. Progression of resistive gym workouts**
- 3. Progress trunk and UE training**

#### Treatments:

- increase resistances and times to all exercises
- **avoid any repetitive impact exercise**
- Continue proprioceptive training
- Cross training
  - Outdoor bicycling
  - Skating
  - Rollerblading
  - Cross-country skiing
  - Swimming
- Trunk and UE resistance and endurance training
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### **Postoperative Week 21 – 1year**

#### **Goal:**

- 1. Full return to unhindered sports/activities**
- 2. Progress trunk and UE training**

#### Treatments:

- initiate impact training
  - light jog on treadmill
  - Progress jogging to outdoors
- Progress resistance training with emphasis on single limb loading.
- Jumping, landing, running in circles, carioca, cutting
- Sport specific drills in a controlled setting
- Progress speeds and intensities until full speed
- Trunk and UE resistance and endurance training

***Return to sports requires clearance from surgeon and the ability to perform all duties of the sport being returned to at the necessary speed, strength, intensity and level of difficulty.***