
ANKLE OCD/TALAR DOME OSTEOCHONDRAL ALLOGRAFT PROTOCOL

Osteochondritis dissecans (OCD) is often caused by a chip-type fracture with a severe ankle sprain. Initially, the symptoms are similar to an ankle sprain. Later, patients may complain of a catching sensation in the ankle. The majority of the lesions are located medially on the talar dome by a plantarflexion inversion trauma. The incidence of talar dome OCD is < 1%.

Conservative treatment of OCD lesions includes immobilization and NWB x 6 weeks, then initiation of physical therapy for Berndt and Hardy type 1, 2 and 3 lesions. Large type 3 and type 4 lesions are considered operative candidates. Types of operative treatment include excision alone (defect untreated) and excision and curettage. Osteochondral transplantation (OATS) may be considered.

Berndt and Hardy Classification:

- Type 1: subchondral fracture
- Type 2: partially detached fragment
- Type 3: detached but nondisplaced fragment
- Type 4: displaced fragment

OATS Post Op Protocol

Preoperative Physical Therapy

Pre surgical Gait Training, Balance Training, Crutch Training and Knee Scooter Training

Phase I- Protection (Weeks 0 to 6)

WEEKS 0-2: Nonweightbearing (NWB) in splint or boot

- Elevate the leg above the heart to minimize swelling 23 hours/day
- Ice behind the knee 30 min on/30 min off (Vascutherm or ice bag)
- Minimize activity and focus on rest
- Acetaminophen (e.g. Tylenol) 500mg every 6 hours alternating with ibuprofen 600mg every 6 hours or meloxicam 15mg once daily. Narcotic pain medication (hydrocodone or oxycodone) should be reserved for breakthrough pain as second line medication. Do not take over 4,000mg of acetaminophen per day.

1ST POSTOP (5-7 DAYS): Depending on the surgical incision at the time of surgery, your surgeon may have you come back early to re-evaluate wound and apply new dressing. Dressing changed, cast applied

- Continue strict elevation, ice, NWB

WEEK 2-3: Sutures removed, cast changed

WEEKS 4-6: Transition to walking boot, continue NWB

- Begin physical therapy for PROM, AAROM and AROM ankle progression as appropriate
- Begin NWB hip and knee strengthening and AROM exercises
- Ice and elevation for edema control

Phase II- Range of Motion and Early strengthening (Weeks 6 to 12)

WEEKS 6-8:

- Full weightbearing as tolerated (WBAT) permitted at 6 weeks
- Focus on normalizing gait in shoe gear
- Progression of ankle AROM to WNL
- BAPS board in seated

WEEK 8+:

- Begin ankle strengthening (theraband 4-way, heel raises in standing)
- Begin single leg balance and proprioception progressive training (stable surface to unstable surface)
- BAPS board in standing

PHYSICAL THERAPY: start between 4-6 weeks post op, focus on motion and swelling at first, then gait training and strengthening; patient specific desires on gait training with/without therapist

DRIVING: Prior to driving, you must be able weightbear on your right foot without crutches. In addition, you may begin driving at 9 weeks if surgery on right ankle; if left ankle, may drive automatic transmission car when off narcotic pain medication

FULL ACTIVITY: This may take 6 to 18 months. There is no guarantee on outcome. All conservative management options have risk of worsening pain, progressive irreversible deformity, and failing to provide substantial pain relief. All surgical

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management options have risk of infection, skin or bone healing issues, and/or worsening pain. Our promise is that we will not stop working with you until we maximize your return to function, gainful work, and minimize pain.

SHOWERING: You may shower with soap and water 1 day after surgery. Avoid lotions, creams, or antibiotic ointments on surgical site until directed by your orthopaedic surgeon. No baths or submerging operative site under water until incision has completely healed.

SKIN CARE: Steristrips are typically placed on your incision at your follow up appointment. Steristrips will typically fall off on their own. Remove steristrips in shower after 3 weeks if they remain on incision. Incisions may become sensitive. Some surgical incisions based on their location and patient factors are more likely to require postoperative scar desensitization with physical therapy. You may use Mederma or other skin protectant lotion once incisions have completely healed and approved by your orthopaedic surgeon. Do not place cortisone or other steroid on your incision unless directed by your orthopaedic surgeon. Incisions and surgical site scars are more prone to burn by ultraviolet radiation when out in the sun. Always apply sun screen onto the healed incision once fully healed.

STOOL SOFTENERS: While on narcotic pain medication (e.g. Norco/hydrocodone or Percocet/oxycodone) especially within first 72 hours of surgery, you should take stool softener (e.g. Miralax, docusate, senna). Discontinue if you develop loose stool or diarrhea.

REFERENCES

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3. Treatment of Osteochondral Lesions of the Talus: A Systematic Review. Zengerink M, Struijs PA, Tol JL, Niek van Dijk C. Knee Surg Sports Traumatol Arthrosc. Feb 2010; 18 (2): 238-246.