

**HAGLUND DEFORMITY RESECTION PROTOCOL:****Haglunds Excision/Achilles Debridement and Repair or Reconstruction-Surgical Treatment**

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Haglund's deformity or "pump bump" is an increased prominence of the posteriorsuperior portion of the calcaneus. It can cause increased pain in the posterior heel area by irritating the bursa and achilles tendon insertion. When conservative measures fail to provide relief, surgical intervention may be used. It is important to communicate with the surgeon in order to determine the procedure performed as this will determine the post op course.

This surgery briefly involves the careful removal of the Haglunds spur in the back of the heel and debridement (removal of inflammatory tissue) of the Achilles tendon, followed by the repair of the tendon down to the bone with strong plastic screws and thick suture. Sometimes, the Achilles is too damaged and a tendon transfer (with the FHL tendon in the back of the ankle) is indicated.

**\*\*Please note that this is a general guideline, and may be tailored to specific patient needs and conditions\*\***

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**Preoperative Physical Therapy**

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

**Phase 1: Protection and Healing (0-8 weeks)****GOALS:**

- Protect the repair
- Decrease swelling
- Provide optimal conditions for wound healing and healing of the repair
- Initiate gentle range of motion (ROM) activities

**WEEK 1:** Discuss procedure and quality of tissue with MD to determine how quickly to progress.

- Splint to Protect Incision
- NO WEIGHT BEARING in splint
- Elevate leg above heart 23 hours/day
- Ice behind knee to control pain and swelling
- Avoid direct pressure right behind the heel
- 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 POST OP (5-7 DAYS):** Dressing change in the office and application of plantar flexed cast

- Continue strict elevation and ice

**WEEK 2-3:** Sutures out

- Active motion protocol-begin ankle dorsiflexion/plantar flexion (move ankle up and down) out of boot/splint, 5 minutes, 5 times per day
- Pt may begin A/AROM exercises
  - o No dorsiflexion beyond neutral
  - o May initiate exercises for proximal joints in NWB (ie SLR, sidelying hip abduction)
- Compression stocking to be worn to control swelling along with ice/elevation (16 hours per day)
- Keep incision completely dry for first 2 weeks; may then shower but do NOT immerse in water (no pools, tubs, lakes, oceans, etc) for 6 weeks
- Continue active motion protocol

**WEEK 5:** Begin protected weight bearing IN BOOT with 3 wedges

- Start with 25% weight, progress 25% per week until 100%
- Take one wedge out per week
- Monitor for swelling, use modalities for swelling and pain control.
- Wear CAM boot or splint while sleeping until 8 weeks post op.
- Use assistive device (walker, crutches, rollabout) at all times for safety
- Begin physical therapy. Note that the therapist should not at this time start passive dorsiflexion (movement of the ankle and toes towards the head); this will overstretch the tendon
  - o Continue to work on AAROM and AROM with goal of obtaining neutral DF by 4-6 weeks post op
  - o Limit active dorsiflexion to neutral and no passive stretching into dorsiflexion until 8 weeks post op.

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- Initiate static balance activities in boot at 6 weeks post op.
- Patient may ride stationary cycle with light resistance with boot/ brace on for 10 to 20 minutes.
- Progress with PREs for proximal muscles and joints avoiding any closed chain activities with dorsiflexion past neutral until 8 weeks post op.
- Initiate desensitization and scar mobility when wound is healed.

#### **Phase 2: Recovery (8-12 Weeks)**

##### **GOALS:**

- Return to normal gait pattern
- Pain and edema control
- Progress functional ROM

##### **WEEKS 8-10**

- Wean from boot to shoes with gel heel lift
- SLOWLY transition to regular shoe wear initially around the house, then increase to outside activities
- Pt may be progressed to HEP/ gym program if gait is normal and pain and edema are minimal.
- Initiate WB activities outside of boot and gradually progress. May use heel lifts or towels to maintain foot and ankle in slight plantarflexion.
- Initiate static balance activities as tolerated
- Initiate gentle passive dorsiflexion at 8 weeks
- Initiate light resistance bands (level 1)
- Continue modalities and manual for pain, desensitization, scar mobility

##### **WEEKS 10-12**

- Progress balance with dynamic activities
- Initiate retro walking if patient has appropriate dorsiflexion ROM (5-10 degrees active)

#### **Phase 3: Retrain (12 to 24 Weeks)**

##### **GOALS:**

- Improve functional mobility with stairs.
- Improve tolerance for ambulation
- Strength to WNL
- ROM to WNL
- Progress to return to prior level of activity/ sport

##### **MONTHS 3-6:**

- Progress progressive resistance exercises (PRE) as tolerated with focus on eccentric control with plantar flexion
- Progress closed chain activities
- Progress walking program, may progress to walk/ jog when able to perform minimum 15- 20 single leg toe raises with good control
- Non-athletic patients may be discharged to HEP/ Gym program

**PHYSICAL THERAPY:** start between 4-6 weeks post op, focus on motion and swelling at first, then gait training and strengthening

**DRIVING:** Prior to driving, you must be able weightbear on your right foot without crutches. In addition, you may begin driving at 8 weeks if surgery on right ankle or able to weightbear for 2 weeks; 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 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

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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.

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