NICHOLAS L. STRASSER, MD
FOOT & ANKLE SURGERY
(615) 936-7846
nickstrassermd.com

REHABILITATION PROTOCOL

MIS Insertional Achilles Repair (SpeedBridge)

Minimally Invasive Haglund's Resection / Insertional Achilles Debridement with Knotless Double-Row Repair — Rehabilitation Protocol

Version: November 2026 · Online: nickstrassermd.com/haglunds-rehab-protocol

> This protocol is a general guideline and does not replace individualized medical advice. Timelines vary with the procedure performed, healing, and individual factors. Always follow the specific instructions from your surgeon and physical therapist, which take precedence over this document.

About the Surgery

Haglund's deformity or "pump bump" is an increased prominence of the posterosuperior portion of the calcaneus. It can cause pain in the back of the heel by irritating the bursa and the Achilles tendon insertion. When nonoperative measures fail to provide relief, surgery may be recommended.

This protocol is written for a **minimally invasive (MIS)** approach. Through small incisions, the Haglund's prominence is removed and the diseased portion of the Achilles insertion is debrided. The tendon is then secured back to the heel bone with suture anchors in a knotless double-row (**SpeedBridge**) construct, which spreads the repair across a broad footprint on the bone.

This protocol is for the **minimally invasive (SpeedBridge)** repair. If you had a traditional open repair, follow the Open Insertional Achilles Repair protocol instead. Progression may also be slower after an FHL tendon transfer or when tendon quality is poor; your surgeon will tell you if your plan differs.

At a Glance

- **Weeks 0–2:** Splint, non-weight bearing
- **Weeks 2–6:** Walking boot with felt heel lifts, full weight bearing as tolerated; remove one heel-lift layer per week; physical therapy begins
- **Week 6:** Out of the boot and into regular shoes
- **Weeks 6–12:** Restore motion, normal walking, and strength
- **Months 3–6:** Progressive strengthening and return to activity

Phase 1: Protection and Healing

Weeks 0–2

GOALS

- Protect the repair
- Decrease swelling
- Provide optimal conditions for wound healing

SWELLING & WOUND CARE

- Elevate leg above heart level as much as possible
- Ice behind the knee to control pain and swelling
- Avoid direct pressure right behind the heel

WEIGHT BEARING & IMMOBILIZATION

- Splint at all times to protect the repair and incision
- **NO WEIGHT BEARING** — use crutches, a knee scooter, or a walker

EXERCISES

- Move the toes frequently

- Keep the splint clean and dry

- Exercises for the hip and knee while non-weight bearing (e.g., straight leg raises, sidelying hip abduction)

Phase 2: Protected Weight Bearing in Boot

Weeks 2–6

GOALS

- Begin protected weight bearing
- Restore ankle motion up to neutral without stretching the repair
- Control swelling and protect the healing incision

WEIGHT BEARING & IMMOBILIZATION

- Transition from splint to a CAM walking boot at the 2-week visit (sutures out)
- **Full weight bearing as tolerated in the boot** with felt heel lifts
- Start with 3 felt layers in the boot; **remove one layer per week** until the foot is flat in the boot
- Use crutches or another assistive device until walking is comfortable and steady in the boot
- Wear the boot at all times when up and walking

RANGE OF MOTION

- Active ankle motion out of the boot: move the ankle up and down, 5 minutes, 5 times per day
- Active and active-assisted ROM; **no dorsiflexion past neutral**
- **No passive stretching into dorsiflexion** until 6 weeks post-op

PHYSICAL THERAPY (BEGINS AT 2 WEEKS)

- Swelling control, gentle active ROM within limits, gait training in the boot
- Stationary cycling with light resistance in the boot, 10–20 minutes
- Progressive strengthening for the hip, knee, and core
- Static balance in the boot as tolerated
- No closed-chain activities that take the ankle past neutral dorsiflexion
- Scar mobilization and desensitization once the incision is healed

SWELLING & WOUND CARE

- Compression stocking, ice, and elevation to control swelling
- Shower once the incision is dry and sealed; no soaking (baths, pools, hot tubs) until the incision is fully healed

Phase 3: Transition to Shoes and Restore Function

Weeks 6–12

GOALS

- Normal walking pattern without the boot
- Restore functional ankle range of motion
- Begin calf strengthening

WEIGHT BEARING & FOOTWEAR

- **Out of the boot at 6 weeks** and into regular, supportive shoes
- Increase time in shoes gradually — around the house first, then outside
- Return to the boot for long walks or crowded settings if sore or swollen

RANGE OF MOTION

- Begin gentle passive dorsiflexion at 6 weeks
- Progress toward full, symmetric ankle motion

PHYSICAL THERAPY

- Gait training to normalize walking
- Light resistance bands (level 1), progressing as tolerated
- Double-leg calf raises, progressing to single-leg as strength allows
- Static, then dynamic balance training

- Retro walking once active dorsiflexion reaches 5–10 degrees
- Continue manual therapy for swelling, scar mobility, and desensitization
- Progress to a home exercise / gym program once gait is normal and pain and swelling are minimal

Phase 4: Retrain

Months 3–6

GOALS

- Improve functional mobility with stairs
- Improve tolerance for walking
- Strength and ROM to within normal limits
- Progress to return to prior level of activity/sport

STRENGTHENING & RETURN TO ACTIVITY

- Progressive resistance exercises (PRE) as tolerated, with focus on eccentric control in plantar flexion
- Progress closed-chain activities
- Progress walking program; may progress to walk/jog when able to perform a minimum of 15–20 single-leg heel raises with good control
- Non-athletic patients may be discharged to a home exercise / gym program

DRIVING

- **Left foot:** may drive an automatic transmission vehicle when off narcotic pain medication
- **Right foot:** may drive once out of the boot, walking normally, off narcotic pain medication, and able to perform an emergency stop