



Ankle and Foot Fusions and Bone Grafts Rehabilitation Protocol

Bryan D. Den Hartog, MD
BryanDenHartogMD.com

This protocol provides you with general guidelines for initial stage and progression of rehabilitation according to specified time frames, related tissue tolerance and directional preference of movement. Specific changes in the program will be made by the physician as appropriate for the individual patient.

****Please fax initial assessment and subsequent progress notes directly to
Dr. Den Hartog at 763-302-2737.****

REMEMBER: It can take up to a year to make a full recovery, and it is not unusual to have
intermittent pains and aches during that time!

***General Guidelines: Expected period before you will be FULL weight bearing:**

Ankle joint: 6-10 weeks Lisfranc:

6-10 weeks

Subtalar: 6-10 weeks

Triple arthrodesis: 6-10 weeks

Great toe fusions: WB as soon as comfortable as long as you walk on heel or flat- footed

PHASE I: WEEKS 1-2

GOALS

- Rest and recovery from surgery
- Control swelling and pain
- Increase ADL (activities of daily) with safe use of crutches/Roll-About

GUIDELINES

- Splint, flatfoot weight-bearing
 - Can stand on leg when showering, but don't walk
- Sutures removed @ 10 -14 days
- Encourage ADL
- Education on proper crutch use
- Rest and elevation to control swelling and pain
- Education: surgical procedure, anatomy, healing time, rehab phases
- Hip: AROM (active range of motion)
- Knee: AROM

PHASE II: WEEKS 3-6

GOALS

- Maintain hip and knee ROM
- Improve core, hip and knee strength
- Safe use of crutches/Roll-About
- Protect fusion site

GUIDELINES

- Fiberglass cast or Cam boot: still flat foot weight-bearing
- Elevate to control swelling
- Education: protect graft
- Can WB when Standing to do ADL
- Core exercises
 - recruit abdominals
 - bridging
 - ball reach
- Hip: AROM
 - - strength: clam side lift glut max SLR (Straight leg raise)
- Knee: AROM
 - - strength: theraband press
- Ankle: depending on surgeon's evaluation, AROM with ankle DF/PF, (dorsiflex/plantarflex) inversion/eversion may be suggested at 6-8 weeks
- Stretching: gluts, piriformis, rectus femoris, hamstrings
- X-ray taken week 6-7

PHASE III: WEEKS 6-10

GOALS

- FWB(full weight bearing) in walker boot
- Increase core, hip, and knee strength

GUIDELINES

- Gradual FWB in walker boot depending upon x-ray findings *greatly depends on joint fused*
- Elevation for swelling control
- Stationary bicycle
- Continue core, hip and knee strengthening

PHASE IV: WEEKS 11-12

GOALS

- FWB without boot

GUIDELINES

- Wean from walker boot *depending on joint fused* (may begin earlier based on surgeon's evaluation)
 - Might be provided with an ankle brace
- Massage to decrease edema
- AROM: ankle DF/PF, inversion/eversion
- Muscle stimulation to intrinsics, invertors/evertors as required
- Start gait retraining
- Progress exercises to standing
- Leg press
- X-ray taken in week 12

PHASE V: WEEKS 13-15

GOALS

- Full ROM non-fused joints
- Near full strength
- Optimal gait pattern

GUIDELINES

- X-ray shows good healing at graft site
- AROM and PROM at ankle and non-fused joints
- Stretches: calf, rectus femoris, hamstrings, glut, piriformis
- Manual mobilization to any restricted nonfused joints of the ankle, foot and toes
- Gait retraining to optimal mechanics with fusion
- Strength training ankle
 - toe raises
 - theraband NWB DF, inv/eversion
 - WB inversion/eversion
- Proprioceptive training: progression
 - single leg even ground
 - double leg stance on wobble board or Sissel
 - single leg stance on wobble board or Sissel

PHASE VI: WEEKS 16

GOALS

- Full strength
- Full function for work

GUIDELINES

- Strength training: work specific
- Proprioceptive training: to level required with work
- Continue gait retraining if required
- Orthotics or shoe modifications if needed to improve gait pattern