

# WORKERS' COMPENSATION BOARD

6951 Westminster Highway, Richmond BC V7C 1C6 Telephone (604) 279-7576 Fax (604) 231-8423

Mailing Address: PO Box 5350 Stn Terminal Vancouver BC V6B 5L5

## **Most Ankle Fusions and Bone Grafts:**

# **Post-op Rehabilitation Guidelines**

These guidelines are intended for Compensation Services and Clinical Staff as general guides for the direction, timing and expected outcomes for post-surgical rehabilitation clients seen through the Visiting Specialists Clinic. Deviations from these guidelines may occur based on the specifics of individual cases and surgeon preference.

# **Procedure: Most Ankle Fusions and Bone Grafts**

Phases and	Rehabilitation Guidelines	Goals of the phase	Notes
Expected Time Lines		•	
Week 1-2	<ul> <li>cast NWB</li> <li>sutures removed @ 10 -14 days</li> <li>encourage ADL</li> <li>education on proper crutch use</li> <li>rest and elevation to control swelling and pain</li> <li>education: surgical procedure, anatomy, healing time, rehab phases</li> <li>hip: AROM</li> </ul>	<ul> <li>rest and recovery from surgery</li> <li>control swelling and pain</li> <li>increase ADL with safe use of crutches</li> </ul>	
Week 3-8	<ul> <li>knee: AROM</li> <li>walker boot NWB or fiberglass cast</li> <li>elevate to control swelling</li> <li>education: protect graft</li> <li>stand to do ADL</li> <li>core exercises         <ul> <li>recruit abdominals</li> <li>bridging</li> <li>ball reach</li> </ul> </li> <li>hip: AROM         <ul> <li>strength: clam</li> <li>side lift</li> <li>glut max</li> <li>SLR</li> </ul> </li> <li>knee: AROM         <ul> <li>strength: theraband press</li> </ul> </li> <li>ankle: depending on surgeon's evaluation, AROM with ankle DF/PF, inversion/eversion may be suggested at 6-8 weeks</li> <li>stretching: gluts         <ul> <li>piriformis</li> </ul> </li> <li>rectus femoris</li> </ul>	<ul> <li>maintain hip and knee ROM</li> <li>improve core, hip and knee strength</li> <li>safe use of crutches</li> <li>protect fusion site</li> </ul>	
	hamstrings  • x-ray taken week 6-7		
Week 8-10	<ul> <li>gradual FWB in walker boot depending upon x-ray findings *greatly depends on joint fused*</li> <li>elevation for swelling control</li> <li>stationary bicycle</li> <li>continue core, hip and knee strengthening</li> </ul>	<ul> <li>FWB in walker boot</li> <li>increase core, hip, and knee strength</li> </ul>	
Week 11-12	<ul> <li>wean from walker boot *depending on joint fused* (may begin earlier based on surgeon's evaluation)</li> <li>massage to decrease edema</li> <li>AROM: ankle DF/PF, inversion/eversion</li> <li>muscle stimulation to intrinsics, invertors/evertors as required</li> <li>start gait retraining</li> <li>progress exercises to standing</li> <li>leg press</li> <li>x-ray taken in week 12</li> </ul>	FWB without boot	

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Phases and	Rehabilitation Guidelines	Goals of the phase	Notes
Expected Time Lines			
Week 13-15	<ul> <li>x-ray shows good healing at graft site</li> <li>AROM and PROM at ankle and non-fused joints</li> <li>Stretches: calf         rectus femoris         hamstrings         glut, piriformis</li> <li>manual mobilization to any restricted non-fused joints of the ankle, foot and toes</li> <li>gait retraining to optimal mechanics with fusion</li> <li>strength training ankle         - toe raises         - theraband NWB DF, inv/eversion         - WB inversion/eversion</li> <li>proprioceptive training: progression</li> <li>single leg even ground</li> <li>double leg stance on wobble board or Sissel</li> <li>single leg stance on wobble board or Sissel</li> </ul>	<ul> <li>full ROM non-fused joints</li> <li>near full strength</li> <li>optimal gait pattern</li> </ul>	
Week 16	<ul> <li>strength training: work specific</li> <li>proprioceptive training: to level required with work</li> <li>continue gait retraining if required</li> <li>orthotics or shoe modifications if needed to improve gait pattern</li> </ul>	<ul><li>full strength</li><li>full function for work</li></ul>	

## \*Depending on joint fused and ongoing level of pain/discomfort:

Ankle joint WB 12-16 weeks
Lisfranc NWB 8-10 weeks
Subtalar WB 6-8 weeks
Triple arthrodesis NWB 8-10 weeks

1<sup>st</sup> MTP Heel weight bearing 8-10 weeks

#### Legend of Abbreviations:

ADL activities of daily living AROM active range of motion

DF dorsiflexion
FWB full weight bearing
NWB non weight bearing
PF plantarflexion

PROM passive range of motion

SLR straight leg raise WB weight bearing

### Developed by:

The post-operative rehabilitation guidelines are based on protocols identified from an extensive review of the current surgical and rehabilitation literature along with VSC and community orthopaedic surgeon, physical medicine specialist, and sports medicine physician input. The Orthopaedic Section of the BCMA has reviewed these guidelines during their development and has been helpful in that process. Representatives from the Physiotherapy Association of B.C. have also reviewed these guidelines.

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