

Ankle ORIF



Rehab Protocol
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PHASE 1: Generally 0-4 Weeks Post-Op	
GOALS:	1) Protect surgical repair 2) Minimize pain and swelling 3) Minimize pain, swelling, muscle atrophy, and deconditioning 4) Achieve full ankle ROM
PRECAUTIONS:	- ALWAYS wear the CAM boot for ambulation once splint/short leg cast (SLC) is removed until 6 weeks post-op - Depending on the location of the articular cartilage defect and subsequent graft, patients may have active and/or passive range of motion restrictions. - Low impact exercise only for 16 weeks. - Exercise prescription is dependent upon the tissue healing process and individual functional readiness in all stages. If there are any concerns/complications that arise regarding the patient's progress, the Orthopedic Surgeon should be notified.
BRACE/CRUTCHES:	- Per Orthopedic Surgeon: <ul style="list-style-type: none"> • Weeks 0-3: NWB in CAM boot, Aircast or brace • Weeks 4-6: PWB to WBAT • Weeks 6-8: WBAT - D/C crutches between 4-5 weeks when gait is WNL
WOUND:	- Shower after post-op day #2 (cover splint/SLC when showering) - DO NOT SUBMERGE ankle in tub or pool for 4 weeks - Suture removal @ 10-14 days post-op per Ortho - Begin scar massage after incision site has healed and scar is formed
CRYOTHERAPY:	- Cold with compression/elevation <ul style="list-style-type: none"> • First 48 hrs: every hour for 15 minutes when awake • After 48 hrs: 3x per day for 15-30 minutes as tolerated
REHABILITATION:	- Frequent use of cryotherapy with LE elevated - Perform rehabilitation exercises as tolerated - Emphasis on manual therapy to decrease fibrosis
~ Weeks 1-2	- Hip and knee AROM exercises - Intrinsic foot strengthening/toe posture and short foot exercises (i.e. resisted towel curls and toe yoga) - Knee and hip supine/seated open kinetic chain (OKC) strengthening exercises as tolerated (i.e. SLRs, LAQs, and SAQs) - Ankle isometrics as tolerated - Calf stretching in sitting - UBE for aerobic strength/endurance and UE weight lifting (seated)
~ Weeks 3-4	- Ankle AAROM to AROM exercises (i.e. alphabet, CW/CCW circles, and

	seated wobble board to tolerance) - Towel crunches and lateral towel pulls - Grade II-III talocrural mobilizations (A/P & distraction) - Standing gastroc-soleus stretch - Stationary bike with light resistance while wearing brace-gradually progress - Transfer/gait training within WB precautions - Multi-directional step ups - Initiate aquatic PT once incisions closed
~ Weeks 5-6	- Begin scar massage once incision is healed - Progressive ankle strengthening with theraband - DL to SL heel raise progression - Functional Exercises: squats (DL to SL), leg press, calf exercises, HS curls, hip abd/add, step ups (increase height and speed) - Balance/proprioceptive exercises
FOLLOW-UP:	- Supervised rehabilitation: 1-2x per week - PT re-evaluation: monthly - Orthopedic re-evaluation: 2 & 6 weeks post-operatively
DOCUMENTATION:	- Precautions, pain level, medications, and modalities - Ankle ROM & gait - Observation <ul style="list-style-type: none"> • Incision sites healing well? • Signs/symptoms of infection? - Neurovascular status <ul style="list-style-type: none"> • Distal pulse? • Motor/sensation nerves intact? • Presence of calf pain?

PHASE 2: Generally 7-10 Weeks Post-Op	
GOALS:	1) Normal Gait 2) Full ROM & Strength
PRECAUTIONS:	Protect healing tissue
BRACE:	Ankle Brace per PT/Ortho
REHABILITATION:	Continue Phase I exercises as needed Progress to the following exercises and increase intensity gradually when patient is ready (i.e. no increase in knee pain or effusion since the previous exercise session)
~ Weeks 7-8	- Aggressive stationary biking & elliptical for conditioning (add Stairmaster gradually) - Ankle ROM exercises- grade IV mobilizations/manual stretching as needed - Progressive standing balance exercises (airex, plyoball, platform training, etc.) - Progressive strengthening (calf press, leg press, squats (0-45°), HS curls, hip abd/add) - Lunge progression (forwards, backwards, lateral)
~ Weeks 9-10	- Dynamic warm-up: knee hug walking, calf stretch, walking lunge, carioca and toe-tap - Windmill toe touch - Progressive double limb functional training: Begin at 25-50% intensity & progress gradually (jumping, hopping, directional jogging, cariocas, shuffles,

	etc.) - May begin progressive jogging program and Alter G: (Begin jogging for 5-20 minutes TIW - increase time and/or distance no more than 10% per week) - Progressive pool program as tolerated - Progressive strengthening (calf press, leg press, squats (0-60°), HS curls, hip abd/add) - Proprioception exercises - Cardiovascular training: Treadmill, Stairmaster, Elliptical and VersaClimber - Aquatics as needed - Initiate straight plane plyometrics and bilateral jumps <ul style="list-style-type: none"> • Jumps up to and down from 4-inch, 6-inch, 8-inch and 12-inch • Vertical jumps in place then in series
FOLLOW-UP:	- Supervised rehabilitation: 2-3x per week - PT re-evaluation: monthly - Orthopedic re-evaluation: 3 months post-operatively
TESTING:	- Y-balance testing

PHASE 3: Generally 11-14 Weeks Post-Op	
GOALS:	1) Normal Strength 2) Jog at own pace and distance without pain 3) Hop for distance > 90% of uninvolved side 4) Return to all activities by 6 months post-operative
PRECAUTIONS:	- Patient must be able to perform at least 10 repetitions of pain-free plyometric activity. If unable, delay the exercises until that is achieved. - Begin with 10 reps of one plyometric activity and progress up to three plyometric activities with a max of 2 sets of 10. - Avoid high reps of plyo's and full strengthening on same day
BRACE:	None Required
REHABILITATION:	Continue Phase II exercises as needed Progress to the following exercises and increase intensity gradually when patient is ready (i.e. no increase in pain or effusion since the previous exercise session)
~ Weeks 11-14	- Continue other phase II exercises as needed - Progress in duration and intensity of exercise only if there is no increase in ankle pain or edema since the previous exercise session. - Warm-up: 5-10 minutes (bike, elliptical, stairmaster) - General LE stretching: 5-10 minutes (calf, HS, quads, HF, hip adductors) - Progressive strengthening (calf press, leg press, squats (0-90°), HS curls, hip abd/add) - Progressive balance training as needed - Progressive jogging program (increase time and/or distance no more than 10-20% per wk) - Progressive single limb functional training: Begin at 25-50% intensity & progress gradually
FOLLOW-UP:	- Supervised rehabilitation: 1-2x per week - PT re-evaluation: monthly - Orthopedic re-evaluation: 3 & 6 months post-operatively
TESTING:	- Multiple Hop Test - Single-leg hop test for time and distance
DISCHARGE GOALS:	- Hop test and Y-balance limb symmetry > 90%

	<ul style="list-style-type: none"> - Isokinetic testing limb symmetry > 85% - Full return to sports/athletics and military training without limitations
MISCELLANEOUS:	<ul style="list-style-type: none"> - After 3 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated. - The recommendation is to wait until 12-20 weeks post-op to return to contact/collision sports or aggressive military training. This time period may be adjusted slightly by the surgeon and therapist according to patient progress.

These guidelines were created as a framework for the post-operative rehabilitation program. They DO NOT substitute for any specific restrictions or requirements that are determined through the necessary shared decision-making and collaboration between the operating surgeon and treating rehabilitation team.