



Orthopedic Surgery, Sports Medicine & Arthroscopy Specialists

Jonathan Watson, MD

REHABILITATION PROTOCOL- Ankle Arthroscopy, microfracture

The rehabilitation guidelines are presented in a criterion based progression program. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehab compliance, tissue quality and injury severity. Specific time frames, restrictions, and precautions may also be given to protect healing tissues and the surgical repair/reconstruction. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

Special attention must be given to impairments that caused the initial problem. For example, if the patient is s/p partial medial meniscectomy and they have a varus alignment, post-operative rehabilitation should include correcting muscle imbalances or postures that create medial compartment stress.

INDIVIDUAL CONSIDERATIONS: S/p

PHASE 1- Surgery to 2 weeks

REHAB GOALS	<ol style="list-style-type: none"> 1. Protection of the post-surgical repair 2. Safe crutch walking 3. Eliminate effusion/swelling
PRECAUTIONS	<ol style="list-style-type: none"> 1. Crutches and non-weight bearing for 4 weeks, partial weight bearing after week 4, advance to full weight bearing at week 6 2. Cryocuff 3-5 times per day for 20 minutes and ice after every therapy session
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Passive hamstring, hip flexor, piroformis stretches ○ Passive plantar flexion ○ Hamstring & calf stretches
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Seated leg raises ○ 4 way SLRs ○ Gait training with crutches ○ Non wt bearing upper extremity strengthening
CARDIOVASCULAR EXERCISE	Upper body circuit training or UBE.
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Minimal pain & swelling ○ SLR without extensor lag

	<ul style="list-style-type: none"> ○ Wound healing
--	---

PHASE 2- 3-6weeks

REHAB GOALS	<ol style="list-style-type: none"> 1. Protection of the post-surgical repair 2. Restore range of motion 3. Begin ankle proprioception/stability 4. Minimize pain and swelling
PRECAUTIONS	<ol style="list-style-type: none"> 1. Crutches and non-weight bearing as tolerated with brace locked in extension until week 4. After week 4 advance to partial weight bearing, gradually add ~10% weight bearing per day until full weightbearing at week 6. 2. Avoid impact activities 3. Cryocuff 3-5 times per day for 20 minutes and ice after every therapy session
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 1 activities ○ Scar/soft tissue mobilizations as needed ○ Begin moderate Achilles passive stretches ○ Anterior tib, posterior tib, plantar fascia stretches
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 1 activities ○ LE- lunges, knee extension/flexion open chain, progress strengthening ○ UE, core- strengthening as tolerated ○ Week 4-Ankle pumps, bent knee & straight knee calf raises ○ Weight shifts when weight bearing ○ Balance/proprioceptive- seated biodex balance system (if available), wobble boards, slide boards
CARDIOVASCULAR EXERCISE	Upper body circuit training (seated), core strengthening or UBE Week 4- stationary bike no/low resistance
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ At least 4/5 ankle strength ○ No effusion ○ Full range of motion ○ Acceptable balance for functional exercise

PHASE 3- 7-10 weeks postop

REHAB GOALS	<ul style="list-style-type: none"> ○ Maintain full ROM ○ Improve gait ○ Progress functional activities, balance, proprioception
PRECAUTIONS	<ul style="list-style-type: none"> ○ No impact activities or plyometrics ○ Continue ice post exercise

RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Continue exercises from phase 2. ○ Passive soleus stretching
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 2 exercises ○ Ball squats within painless ROM ○ Balance/proprioceptive: BOSU ball, BAPS board, progress as tolerated to unilateral, unstable, etc ○ Seated calf raises, toe curls with towels, step ups, medicine ball tosses on operative leg ○ Resisted gait training
CARDIOVASCULAR EXERCISE	<p>Continue phase 2 activities Pool walking</p>
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Normal gait on all surfaces without assistive device ○ Able to perform ADLs without problem ○ Full, painless range of motion

PHASE 4- 11-14 weeks postop

REHAB GOALS	<p>Improve muscle strength & endurance Improve proprioception & balance</p>
PRECAUTIONS	<p>Post-activity soreness should resolve within 24 hours Avoid post activity swelling Continue ice post activity</p>
RANGE OF MOTION EXERCISES	<p>Continue with flexibility exercises</p>
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Progress phase 3 activities with resistance/weight ○ Standing & seated calf raises without weight ○ Balance/proprioception- cont to progress unstable surfaces, etc ○ Ball squat, sumo squat, ankle rocking against resistance
CARDIOVASCULAR EXERCISE	<p>Continue phase 3 activities Elliptical Walking (can begin jogging on Alter-G treadmill if available)</p>
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Full range of motion ○ No pain with ADLs ○ Able to walk 30 min without pain

PHASE 5- 14-24 weeks

REHAB GOALS	Progress functional activity & strengthening Improve endurance
PRECAUTIONS	Post-activity soreness should resolve within 24 hours Avoid post activity swelling
RANGE OF MOTION EXERCISES	Continue with flexibility exercises
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Progress strengthening from phase 4 ○ Add weight to calf raises ○ Agility- ladder drills ○ LE- add dynamic lunges ○ Progress balance/proprioception from phase 4 ○ Progress plyometrics and agility training
CARDIOVASCULAR EXERCISE	<ul style="list-style-type: none"> ○ Continue to progress from phase 4. ○ Week 20-ok to begin jogging
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ No pain or swelling with activity ○ Full ROM ○ Able to perform bilateral jumps without pain

PHASE 6- 25+ weeks

REHAB GOALS	Progress functional activity & strengthening Improve endurance Return to sport/work
PRECAUTIONS	Post-activity soreness should resolve within 24 hours Avoid post activity swelling
RANGE OF MOTION EXERCISES	Continue with flexibility exercises
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Progress strengthening from phase 5 ○ Agility- zig zag cutting, diagonals, figure 8s, back pedaling, carioca, lateral shuffles ○ LE- progress to power/Olympic lifts ○ Progress balance/proprioception from phase 5 ○ Progress plyometrics from bilateral to unilateral, ladder drill with hurdles ○ Trampoline drills ○ Sport specific drills

CARDIOVASCULAR EXERCISE	<ul style="list-style-type: none">○ Continue to progress from phase 4.○ Jog/run progression
PROGRESSION CRITERIA- RETURN TO SPORT	<ul style="list-style-type: none">○ No pain or swelling with sport/work specific activity○ Full pain free ROM○ Ankle/LE- strength 90% of contralateral○ Runner/sprinter- no perceived difference in ankle after appropriate distances