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NON-Operative MCL tear - Rehabilitation protocol

PHASE 1- (0-2 weeks)

REHAB GOALS	<ol style="list-style-type: none">1. Protection of the knee2. Normalize gait3. Eliminate effusion/swelling
PRECAUTIONS	<ol style="list-style-type: none">1. Crutches as needed if painful weight-bearing.2. Hinged knee brace 0-30 deg for ambulation(grade 2/3 injuries).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">○ Soft tissue mobilizations/techniques as tolerated○ LE ROM as tolerated (avoid excessive hamstring stretching)
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none">○ UE/contralateral LE/core strengthening as tolerated○ Single leg stance on stable surface, progress to unstable○ 3 way SLR- abduction, extension, flexion (avoid adduction)○ Short arc quad strengthening, hamstring curls○ Mini-squats, lunges, step-ups/downs, heel raises, lateral steps, eccentric hamstring
CARDIOVASCULAR EXERCISE	Stationary bike, elliptical, UBE

PROGRESSION

CRITERIA

- Full, painless ROM
- Normal gait

PHASE 2- (~2-4 weeks)

REHAB GOALS	<ol style="list-style-type: none"> 1. Restore/maintain full ROM 2. Minimize pain and swelling 3. Progress strengthening
PRECAUTIONS	<ol style="list-style-type: none"> 1. Hinged knee brace, unlock full ROM 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"> ○ Continue phase 1 exercises ○ Manual passive knee extension to neutral as needed ○ Patellar mobilizations, soft tissue mobilization ○ Grade 3 injuries- caution excessive adductor stretching
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 1 exercises ○ Balance/proprioception- progress to unstable, perturbations, etc ○ LE- add adduction SLR (weight proximal to knee), clean, snatch, squats ○ Increase ROM for closed chain strengthening (avoid >90 deg for grade 3) ○ Plyometrics- bilateral hopping on level surface
CARDIOVASCULAR EXERCISE	<p>Continue phase 1</p> <p>Walk/run progression</p>
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Full ROM ○ No swelling ○ No instability

PHASE 3- (~5-8 weeks)

REHAB GOALS	<ul style="list-style-type: none"> ○ Maintain/restore full ROM ○ Improve quad strength & endurance ○ Improve hip & core strength, balance, stability ○ Normal gait
PRECAUTIONS	<ul style="list-style-type: none"> ○ Continue ice after PT ○ Avoid post activity swelling
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> ○ Continue exercises from phase 2. ○ Soft tissue/scar mobilizations as needed ○ PNF dynamic stretching
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> ○ Continue phase 2 exercises ○ LE strengthening- progress to baseline ○ Plyometrics- box jumps, zig zag hops, squat jumps, split jumps. Progress to single leg ○ Progress agility & sport specific activity
CARDIOVASCULAR EXERCISE	<p>Progress to baseline</p>
PROGRESSION CRITERIA	<ul style="list-style-type: none"> ○ Completion of running program ○ 85% quad strength

PHASE 4- (~9-12 weeks)

REHAB GOALS	<ul style="list-style-type: none">○ Restore/maintain full ROM○ Increase strengthening○ Return to sport/work
PRECAUTIONS	Consider brace wear for sporting activities Post-activity soreness should resolve within 24 hours Avoid post activity swelling Continue ice after PT
RANGE OF MOTION EXERCISES	Continue with flexibility exercises
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none">○ Progress phase 3 activities with resistance/weight○ Sport specific/contact activities ok to resume. Begin 50% speed and progress to full speed. Start with single plane activities and move to multi-plane
CARDIOVASCULAR EXERCISE	Continue previous phase exercises
PROGRESSION CRITERIA	<ul style="list-style-type: none">○ At least 90% quad strength○ Complete sport specific/work program○ Pass return to sport test○ Physician clearance

RETURN TO SPORT TEST

- 10 rep max single leg squat with external weight
- Single broad jump landing on one foot
- Triple broad jump landing on one foot
- Single leg forward hop
- Single leg crossover hop
- Single leg medial and lateral hop
- Single leg medial and lateral rotating hop
- Single leg vertical hop
- Single leg triple hop
- Timed 6 meter hop
- 10 yard lower extremity functional test
- 10 yard pro agility run

