

REHABILITATION GUIDELINES FOR MCL REPAIR WITH INTERNAL BRACE: IPSILATERAL HAMSTRING AUTOGRAFT AUGMENTATION

PHASE I (WEEK 0-6 WEEKS)

DATES:

Appointments	<p>MD appointment at 2 weeks for suture removal, 6 weeks for follow up</p> <p>Physical therapy 2 x week beginning 2-5 days post op; can drop to 1 x week once 0-90 ROM is achieved and patient has improved quad set</p>
Rehabilitation Goals	<ul style="list-style-type: none"> Pain and effusion management Full extension symmetrical to contralateral knee before first post op visit at 2 weeks SLR without quad lag by 6 weeks
Precautions	<ul style="list-style-type: none"> PROM 0-90 x 2 weeks, then slow progression to full ROM by 6 weeks Toe touch weight bearing with brace locked at 0 degrees for 2 weeks, then WBAT with brace on and locked at 0 degrees No hamstring contraction x 6 weeks Avoid valgus loads Progressive exercises should be performed with the tibia in IR to decrease stress to the MCL
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Prolonged extension- prone hang, supine with towel roll under ankle Ankle pumps Heel slide, wall slide progressing to full ROM after 2 weeks Quad sets with NMES Isometric quad sets, then SLR/3 way hip with brace- NO ADDUCTION until 4 weeks Patellar mobilizations
Cardiovascular Exercises	<ul style="list-style-type: none"> Stationary bike starting with short crank after 2 weeks
Progression Criteria	<ul style="list-style-type: none"> Good quad control/SLR without lag PROM 0-130

PHASE II (WEEK 6-12 WEEKS)

DATES:

Appointments	MD follow up at 6 weeks and 12 weeks Continue physical therapy 2 x week
Rehabilitation Goals	<ul style="list-style-type: none"> • Progress to full ROM • Normal gait pattern without assistive device or brace • No extensor lag • Good quad control • Core integration
Precautions	<ul style="list-style-type: none"> • Wean out of brace and off of A.D. when patient has good quad control • No planting or twisting of the leg • Avoid valgus loads • Progressive exercises should be performed with the tibia in IR to decrease stress to the MCL
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • HEP 5 x week • Strengthening: begin closed kinetic chain exercises with knee flexion • Total gym, mini squats, mini lunges, bridges, wall squats 0-45 deg, step up/down, leg press 0-60 with resistance up to ½ body weight • Progress neuromuscular proprioceptive/balance exercises including single leg balance progression-varying surfaces • Core exercises: plank, side plank • Pool: begin 4 way hip, lateral movement, deep water walking/jogging in place, progress to freestyle strokes but avoid breaststroke kick
Cardiovascular Exercises	<ul style="list-style-type: none"> • Stationary bike with minimal resistance, progress to road biking outdoor on flat roads only • Treadmill walking, elliptical trainer, stair master • Return to running x 8 weeks
Progression Criteria	<ul style="list-style-type: none"> • Full ROM • Normalized gait pattern • Neuromuscular exercise without difficulty • No dynamic valgus with exercises

PHASE III (3-5 MONTHS)

DATES:

Appointments	Continue PT 1-2 x week
Rehabilitation Goals	<ul style="list-style-type: none"> • Hop drills without difficulty • Good jumping mechanics with no dynamic valgus • Begin return to sport activities
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • HEP 5 x week • Strengthening: closed chain exercises including leg press, lateral step downs, squats, hamstring curls with light weight, high repetition • Agility drills: shuffling, hopping, running patterns <p>Sport specific drills</p>

Cardiovascular Exercises	<ul style="list-style-type: none"> • May start freestyle swimming (avoid frog/breaststroke) • Jogging on treadmill or even ground
Progression Criteria	<ul style="list-style-type: none"> • Running without knee pain or effusion • Hopping/agility drills without knee pain or effusion • Quad strength within 90% of uninjured leg • Return to sport testing for repair at 5 months, reconstruction at 6 months

References: Current Concepts of Physical Therapy 2016 edition, Cincinnati Sports Medicine and Orthopedic Center

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