Matthew H. Blake, MD

Team Physician, *University of Sioux Falls & Dordt University* Assistant Professor University of South Dakota School of Medicine www.MatthewBlakeMD.com



Medial Patellofemoral Ligament Reconstruction Guideline

Time	Goals	Precautions/Restrictions	Treatment
Weeks 0 – 6	 Reduce pain and swelling Motion from 0-90° Maintain patellar mobility Active quadriceps control SLR with no extensor lag 	 Weight-bearing as tolerated Locked in extension first 2 weeks May unlock brace with NWB Avoid extensor lag Increase WBAT 0-90° within brace when no extensor lag No CKC strengthening > 70° of knee flexion 	 ROM: as tolerated Quadriceps recruitment/NMES Hip strengthening Gait training Blood flow restriction; if applicable
Weeks 6 - 12	 Progress ROM to 0-125° Progression of quadriceps strength/endurance Normalized gait mechanics 	 Full-weight bearing Discontinue brace when no extensor lag with repeated SLR May progress closed-chain strengthening up to 90 degrees as tolerated after 8 weeks Discuss bracing with physician 	 ROM: as tolerated Gait training from WBAT to independent Core stabilization exercises Neuromuscular re-education Global LE strengthening Begin functional strengthening exercises (bridge, mini-squat, step up, etc.) Double limb -> single limb balance/proprioception Aerobic training: walking program, stationary bike
Weeks 12 - 16	 Full ROM Increase functional LE strength Isometric strength at > 80% LSI (See functional assessment for return to running criteria) Pass Return to Run criteria Initiate basic plyometrics 	 May increase closed-chain strengthening > 90° No running, jumping, or cutting on painful knee 	 Increase loading capacity for lower extremity strengthening exercises Double limb -> Single limb Continue balance/proprioceptive training Aerobic training: elliptical, stairmaster Week 16: begin low level plyometric and agility training
Months 4 - 6	 Full, symmetric ROM Progress sport specific training Successful progression of return to run program Initiate plyometric and agility training 	 Avoid painful activities/exercises No jogging on painful or swollen knee No participation in sports 	 Progress hypertrophy and strength training Continue balance/proprioceptive training Perform Return to Run testing Increase intensity of plyometric and agility training Initiate running program; if applicable
Months 6+	 Continue to progress functional strengthening Sport-specific training Pass Return to Sport criteria 	 No participation in sports unless specified by care team Avoid painful activities 	 Gradually increase lifting loads focusing on form, control, and tissue tolerance Running program Progress as tolerated: ROM, Strength, Endurance, Proprioception/Balance, agility, Sport specific skills ARC Program

This guideline is not meant to be prescriptive but a recommendation to the rehabilitation process. Progress may vary based on specifics of injury and procedure.