



STEVEN K. BELOW, MD

Rehabilitation Guidelines for Medial Patellofemoral Ligament Repair and Reconstruction

This information and protocol is a guideline, individual variations and changes will apply

PHASE 1 – BEGIN 4 WEEKS AFTER SURGERY TO 6 WEEKS AFTER SURGERY

Appointments	<ul style="list-style-type: none"> Rehabilitation appointments begin 4 weeks postop
Rehabilitation Goals	<ul style="list-style-type: none"> Protection of the postsurgical knee Restore normal knee range of motion Normalized gait Eliminate swelling Restore leg control Transition from partial weight-bearing to weight-bearing as tolerated
Precautions	<ul style="list-style-type: none"> Brace locked in full extension until 6 weeks postop when they will transition into a low-profile lateral patellofemoral stabilizing knee brace Use axillary crutches for gait as needed with brace on, weight-bearing as tolerated Range of motion limitations as stated below
Range of Motion Exercises	<ul style="list-style-type: none"> Progress slowly to 0-90 degrees of knee flexion for passive and active assisted range of motion
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Quad sets Four way leg lifts with brace on in supine for hip strengthening Ankle pumps Ankle isotonic with exercise band
Cardiovascular Exercises	<ul style="list-style-type: none"> Upper body circuit training or use of an upper body ergometer
Progression Criteria	<ul style="list-style-type: none"> 6 weeks after surgery

303 N. Wm. Kumpf Blvd, Peoria, IL 61605
 309.676.5546 phone 309.676.5045 fax



PHASE II (BEGIN AFTER MEETING PHASE I CRITERIA, USUALLY 6 WEEKS AFTER SURGERY)

Appointments	<ul style="list-style-type: none"> • 1-2 times per week or as indicated by therapist
Rehabilitation Goals	<ul style="list-style-type: none"> • Single leg stand control • Good control no pain with short arc functional movements, including partial squats • Good quad control
Precautions	<ul style="list-style-type: none"> • Use of low-profile lateral patellofemoral stabilizing knee brace • Avoid over stressing fixation: Begin movement control and gentle strengthening with closed-chain movements in a shallow arc of motion and by using un-weighting techniques (such as double leg support) • Avoid post activity swelling
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • Gait drills • Functional single plane closed chain movements • Continued gradual progression of range of motion • Gradual progress of lower extremity strengthening with precautions to avoid dynamic valgus or medial knee displacement
Cardiovascular Exercises	<ul style="list-style-type: none"> • Upper body circuit training or upper body ergometer
Progression Criteria	<ul style="list-style-type: none"> • Normal gait on level surfaces • Good leg control without extensor leg, pain, or apprehension • Single leg balance greater than 15 sec • At least 12 weeks after surgery

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PHASE III (BEGIN AFTER PHASE II CRITERIA, USUALLY 12 – 14 WEEKS AFTER SURGERY)

Appointments	<ul style="list-style-type: none"> Once every 1-2 weeks or as indicated by therapist
Rehabilitation Goals	<ul style="list-style-type: none"> Full range of motion No swelling Improved quadriceps strength Improve proximal hip and core strength Improve balance and proprioception
Precautions	<ul style="list-style-type: none"> Avoid closed-chain exercises past 90° of flexion to avoid over stressing the repaired tissues and increased patellofemoral forces Avoid post activity swelling No brace needed when walking but must wear brace for all other activities
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Continue range-of-motion exercises and stationary bike Closed chain strengthening begin with single plane progress to multi-plane Balance and proprioception exercises: Single leg stand, balance board Hip and core strengthening Stretching for patient specific muscle imbalances Straight-ahead activities only
Cardiovascular Exercises	<ul style="list-style-type: none"> Stationary bike or StairMaster Mild jogging with brace on
Progression Criteria	<ul style="list-style-type: none"> Full range of motion No swelling No patellar apprehension Single leg balance with 30° of knee flexion greater than 15 sec Good control and no pain with mini squats

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PHASE IV (BEGIN AFTER MEETING PHASE III CRITERIA, USUALLY 16-18 WEEKS AFTER SURGERY)

Appointments	<ul style="list-style-type: none"> Once every 2-3 weeks or as indicated by therapist
Rehabilitation Goals	<ul style="list-style-type: none"> Good eccentric and concentric multi-plane dynamic neuromuscular control (including impact) to allow for return to work/sports
Precautions	<ul style="list-style-type: none"> Post activities soreness should resolve within 24 hr. Avoid post activity swelling Okay to begin cutting activities in brace
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Impact control exercises beginning 2 feet to 2 feet, progressing from 1 foot to the other and then 1 foot to the same foot Can start low box steps only Movement control exercises beginning with low velocity, single plane activities and progressing to higher velocity, multi-plane activities Progressing to multi-planar at agility drills with progressive increase in velocity in amplitude Sports/work specific balance and proprioceptive drills Hip and core strengthening Stretching for patient specific muscle imbalances
Cardiovascular Exercises	<ul style="list-style-type: none"> Replicate sports or work specific energy demands
Progression Criteria	<ul style="list-style-type: none"> Return to work/sport criteria Dynamic neuromuscular control with multi-plane activities and without pain, instability, or swelling Approval from the physician and/or sports rehabilitation provider Plan to release to full duty/sports at 6 months postop

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