

Assistant Professor of Orthopaedics Division of Sports Medicine Tel: (646) 501-7223

Proximal or Distal Realignment +/- Medial Patellofemoral Ligament Reconstruction Rehabilitation Program

Name:	Date:
Diagnosis:	Date of Surgery:
Phase I -Immediate Postoperative Phase (Day 1-5)	
• Goals:	
 Diminish swelling/inflammation (control hen 	narthrosis)
 Diminish postoperative pain 	
 Initiate voluntary quadriceps control 	
 Independent ambulation 	
• Brace:	
 Brace for ambulation only (POD 1 to Week 4) 	
 Weight-bearing 	
 As tolerated with two crutches (approx. 50%) 	WB)
 Swelling/Inflammation Control 	
 Cryotherapy 	
 Compression bandages 	
 Elevation & ankle pumps 	
 Range of Motion 	
 Full passive knee extension 	
 Flexion to 45° (day 1-4) 	
 Flexion to 60° (day 5) 	
 PROM and gentle AAROM only 	
 Flexibility 	
 Hamstring and calf stretches 	
 PROM/AAROM within ROM limitations 	
Phase II -Acute Phase (Week 2-4)	
• Goals:	
 Control swelling and pain 	
 Promote healing of realignment tibial tuberos 	sity
 Quadriceps strengthening 	
• Brace	
 Continue brace for ambulation only 	
 Discontinue brace (week 4) 	
 Weight-bearing 	
 Progress WBAT (2 crutches for 4 weeks) 	
 Swelling/inflammation 	
 Continue use of cryotherapy 	
 Compression bandage 	
o Elevation	
 Range of motion 	
 PROM/AAROM exercises 	

ROM 0-75° (week 1-3)ROM 0-90° (week 4)

o Electrical muscle stimulation to quads

Muscle Retraining



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- Quad setting isometrics
- o Straight leg raises (flexion)
- Hip adduction/abduction
- Hip extension
- o GENTLE submaximal isometric knee extension
- o Week 4
 - Light leg press
 - Vertical squats (no weight)
- Flexibility
 - o Continue hamstring, calf stretches

Phase III -Subacute Phase "Motion" Phase (Week 5-8)

- Goals
 - o Gradual improvement in ROM
 - o Improve muscular strength and endurance
 - o Control forces on extension mechanism
- Weight-bearing
 - o One crutch (week 4-6)
 - o Discontinue crutch (week 6)
- Range of motion
 - o PROM 0-115°
 - o PROM 0-125°
 - o PROM 0-125/135°
- Exercises
 - Continue electrical muscle stimulation to quadriceps
 - o Quadriceps setting isometric
 - o Hip adduction, abuction, and extension
 - Vertical squats
 - o Leg press
 - Knee extension light (0-60°)
 - o Bicycle (week 6-8)
 - o Pool program [walking, strengthening (when able)]
- Flexibility
 - o Continue all stretching exercises for LE

Phase IV -Strengthening Phase (weeks 9-16)

- Criteria to Progress to Phase IV
 - o ROM at least 0-115 degrees
 - Absence of swelling/inflammation
 - Voluntary control of quads
- Goals
 - o Gradual improvement of muscular strength
 - Functional activities/drills
- Exercises
 - o ½ vertical squats (0-60°)
 - o Wall squats (0-60°)
 - Leg press
 - Forward lunges
 - Lateral lunges
 - o Lateral step-ups
 - Knee extension (60-0°)



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- o Hip adduction/abduction
- o Bicycle
- o Stairmaster

- Criteria to enter Phase V
 - o Full non-painful ROM
 - o Appropriate strength level (80% or greater of contralateral leg)
 - o Satisfactory clinical exam
- Goals

Comments:

- o Functional return to specific drills
- Exercises
 - o Functional drills
 - o Strengthening exercises
 - o Flexibility exercises

Frequency: times per week	Duration: weeks
Signature:	Date: