

R. JOHN ELLIS, JR., M.D.  
LAWRENCE A. SCHAPER, M.D.  
MARK G. SMITH, M.D.  
G. JEFFREY POPHAM, M.D.  
AKBAR NAWAB, M.D.  
MICHAEL L. SALAMON, M.D.  
MATTHEW R. PRICE, M.D.



DANIEL E. RUEFF, M.D.  
SEAN M. GRIFFIN, M.D.  
BRENT J. SINICROPE, M.D.  
EVAN RHEA, M.D.  
KELSI J. BARNES, PA-C  
JENNIFER R. STREET, PA-C

## **DISTAL/PROXIMAL PATELLAR REALIGNMENT PROTOCOL**

### **GENERAL GUIDELINES:**

- CPM machine (if prescribed) at 0°- 30° for the first few days, then increase by 5° increments every other day as tolerated until 90° is reached. Utilize CPM for at least 4-6 weeks unless otherwise instructed by M.D.
- TTWB progressing to WBAT (as indicated by the physician) with crutches in the brace for 6 weeks.
- Initially, brace should be locked at 0° and then unlocked to 60° when adequate quadriceps control is established (as determined by the physician or therapist). Unlock to 90° as tolerated at 4 weeks postop.
- Sleep with the brace locked for immobilization unless otherwise instructed by M.D.
- Keep the entire leg elevated. Do not place pillows under the knee for long periods of time.
- Utilize cryotherapy for 20 to 30 minutes every hour for pain and swelling reduction.

### **WEEKS 0-4**

- Restore superior and medial patellar mobility.
- Restore FULL knee extension within 2 weeks (low load-long duration stretching).
- Hamstring, gastrocnemius, and ITB stretching.
- Ankle ROM/strengthening for swelling and DVT prevention.
- PROM of knee (goal of 0°-60°)
- 4-way open chain straight leg exercises once pain is under control and adequate QUAD control established. (Isometrics until able to do this).
- *Focus on knee remaining locked in concentric and eccentric phase. Increase reps and hold time initially, before adding resistance. No ankle weight until extensor lag is eliminated.*
- Modalities as needed for pain and swelling.
- NMES for Quadriceps activation and re-education.

### **WEEKS 4-8**

- Increase ROM as tolerated (goal of 0°-120°)
- Continue to increase hip resistance during open chain exercises as tolerated (progress to multihip machine)

EASTPOINT OFFICE  
13151 MAGISTERIAL DRIVE, SUITE 200  
LOUISVILLE, KENTUCKY 40223  
Telephone 502-587-1236  
Fax 502-587-0126

BOOKKEEPING DEPARTMENT  
5120 DIXIE HIGHWAY, SUITE 103  
LOUISVILLE, KENTUCKY 40216  
Telephone 502-587-7269  
Fax 502-587-0318

SOUTHEND OFFICE  
5120 DIXIE HIGHWAY, SUITE 103  
LOUISVILLE, KENTUCKY 40216  
Telephone 502-449-0449  
Fax 502-449-3277

- Active Knee extension as tolerated.
- Calf raises
- May start light aquatic exercises once good Quadriceps control is established.
- Mini-squats (0-30°)
- Soft tissue mobilizations as needed for scar and myofascial restrictions.
- Isometric hamstring strengthening on a ball progressing to AROM as tolerated.
- Initiate stationary bike for range of motion without resistance.

### **WEEKS 8-12**

- ROM as tolerated.
- PF brace if needed until adequate VMO return.
- Increase resistance with all exercises as tolerated.
- Hamstring curls to 90° with resistance as tolerated.
- Increase leg strength to allow for normal gait and walking longer distances.
- Start closed chain exercises as tolerated in a protected range. (1/3 Partial Squats, proprioceptive exercises, BAPS board)
- Leg press (0°-60°) with light resistance and high repetitions. (9-12 weeks postop)
- Increase resistance with stationary bike for strength and endurance training.
- Edema control.

### **MONTHS 3-6**

- Low impact weight program increasing intensity of strength and functional training for a gradual return to normal activities.
- Elliptical trainer.
- Core strengthening.
- Regain Quad/hamstring girth and tone.

### **MONTHS 6-9**

- Sport specific training (if applicable).