



# WAYPOINT

## ORTHOPAEDIC ASSOCIATES

### Patellofemoral Syndrome Rehab Protocol

#### Ultimate Goal of Program

1. Improve Functional Status
2. Normalize biomechanical Forces
3. Improve Strength/Power/Endurance
4. Decrease Pain/Inflammatory Status

#### Acute Phase – Maximal Protection

GOALS: Relieve Pain and Swelling  
Decrease inflammation  
Prevent further muscle atrophy  
Maintain/increase flexibility

Weightbearing as tolerated

Ice, compression, elevation

Anti-inflammatory medication (Aspirin or nonsteroidal)

Strengthening exercises (isometric)

- quadricep setting
- multiangle isometrics (non-painful) 90°, 75°, 60°, 45°, 30°
- straight leg raises (four planes of motion)

hip adduction, hip flexion stressed

hip abduction not done with lateral compression syndrome

Electrical stimulation (EMS, TNS, HVGS, Biofeedback) to quadriceps

Balance of soft tissue

- LE flexibility stretches (**especially hamstrings, IT Band, gastroc/soleus**)

Patient education regarding activities, pathomechanics

Avoidance program: squatting, kneeling, excessive knee flexion, stairs, lunges, repetitive activities.

### **Subacute Phase – Minimal Protection**

GOALS: Restore soft tissue balance  
Progress strengthening program  
Enhance proprioception

Continue previous exercises

Progress strengthening program

- Leg press \*
- Hip abduction/adduction
- Hip ER/IR
- Front lunge onto box
- Mini-squat \*
- Wall squat \*

\* May add concomitant isometric abduction or adduction depending on pathology

Proprioceptive drills

- Weight shifts
- Mini squats on unstable surface
- Balance on unstable surface

Assess biomechanical faults/control forces to knee

- Hip strength & flexibility
- Core strength & stability
- Foot mechanics (may fabricate orthotics)
- May continue use of brace

### **Chronic Phase – Progressive Strengthening**

Progress to phase three when: ROM and swelling WNL pain is minimal to none

GOAL: Achieve Maximal Strength & Endurance

Continue SLR

Knee flexion isotonic with resistance is begun

Variable resistance isotonic weight training  
(blocking painful ROM)

- continue shortened range knee extension isotonic
- continue closed kinetic chain exercises

Emphasis on increased functional activities

Dynamic stability drills

- Sport cord lunges
- Core drills
- Lunge/step up on unstable surface
- Single leg balance on unstable surface

Ice therapy post exercise

Avoidance Program: squatting, painful ADL's

**Maintenance Program**

Continue Flexibility Daily (part of warm-up and cool down)

Continue PRE Program 3 times a week

Endurance Training is continued

Continue to be active (walking, swimming, pool running, possible biking with elevated seat)

GOAL: Continue to strengthen without deleterious affects on patellofemoral joint