



ROSENBERG COOLEY METCALF  
THE ORTHOPEDIC CLINIC AT PARK CITY

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**Patellofemoral Dysfunction**  
**Non-Operative Protocol**

**Phase I – Inflammatory Phase:**

- Modalities to control inflammation
  - Prescription anti-inflammatories
  - Ice
  - Clinical modalities as needed
- Evaluate and treat lumbar, sacral, and pelvic dysfunction
- Evaluate for corrective orthotics
- Implement appropriate, selective stretching
  - Iliotibial band
  - Hamstrings
  - Quadriceps
  - Gastrocnemius/soleus
  - Piriformis
- Apply appropriate patella mobilizations
  - Evaluate lateral retinaculum and apply patellar tilt mobilization when indicated
- Begin early VMO/quadriceps strengthening
  - Quad setting
  - Multi-plane straight leg raising
  - Open kinetic chain multi-plane hip strengthening
- Cardiovascular exercise
  - Stationary bike
  - Treadmill walking

**Phase II – Subacute and Early Strengthening Phase:**

- Continue with appropriate Phase I activities
- Advance strengthening
  - Proprioception
  - Closed kinetic chain squat program
  - Closed kinetic chain unilateral squats, dip, and step-up progression
  - Closed kinetic chain multi-plane hip strengthening
- Advance intensity and duration of biking and treadmill walking program

**Phase III – Advanced Strengthening:**

- Advance closed kinetic chain strengthening as appropriate
- Begin gym strengthening, using caution with leg extensions
- Begin light jogging progressing as tolerated

**Phase IV – Return to Sports Program:**

- Continue with Phase III program
- Re-evaluate with physician and therapist
- Advance to return to sport program as motion, strength, and endurance allow

This protocol is intended to provide a general guideline to treating patellofemoral dysfunction. Progress should be modified on an individual basis.