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**Christopher K. Jones, M.D.
Colorado Springs Orthopaedic Group
(719)632-7669**

**Patella Stabilization Rehabilitation
(MPFL and Fulkerson Osteotomy)**

Phase 1 Maximal Protection - Weeks 0 - 6

Goals:

- Protect surgical repair
- Pain and swelling control
- Regain active quadriceps function
- Maintain full extension

Range of Motion

- Weeks 0-2: 0-30 degrees
- Weeks 3-4: 0-90 degrees
- Weeks 5+ : Advance to full ROM as tolerated

Weight-bearing

- Weeks 0-4: Partial WB with hinged brace locked in extension and crutches
- Weeks 5-6: May WB as tolerated with brace locked in extension

Therapeutic Exercise

- Quad sets
- Begin straight leg raises at week 5 with brace off
- Active and active-assist heel slides
- Calf pumps and stretches
- Ankle strengthening with therabands
- Hamstring isotonic and stretches
- Gentle patella **mobilizations** BUT NO LATERAL GLIDES

Criteria for progression to next phase

- Cleared by physician
- Flexion to 100 degrees
- Good quad control and able to do unassisted straight leg raises

Phase 2 Beginning of Functional Rehabilitation - Weeks 7-10

Goals:

- Obtain full Range of Motion



- Improve quad control
- Continue to protect repair avoiding valgus stress and lateral movements

Bracing and Weight Bearing

- Transition to patella stabilization brace as directed by physician
- Full Weight Bearing

Therapeutic Exercises

- Quad sets and straight leg raises
- Active heel slides
- PFJ mobilizations avoiding lateral glides
- Scar mobilization
- Stretching of hamstrings, gastrocnemius and soleus
- Bike - initiate with low resistance
- Wall squats 0 - 45 degrees
- Core body training

Criteria for advancement to next phase

- Able to perform SLR without extensor lag
- Normal gait
- Able to perform squat from 0-45 degrees with good control and no pain

Phase 3 Advanced Functional Rehabilitation: Weeks 3 to 4 months post operative

Goals:

- Progress strength
- Progress dynamic stability
- Improve single leg stability
- Full ROM
- Continue to protect surgical site with limited lateral movements
- Normal gait

Brace

- Continue with patella stabilization brace

Therapeutic Exercises

- Continue with all of the above exercises
- Leg press 0-45 degrees including single leg
- Begin single leg step ups progressing to higher steps as tolerated
- Partial lunges
- Bike with moderate resistance
- 4 way SLR
- Partial squats



- Hamstring curls with machine and/or swiss ball

Criteria for advancement for Sports-specific training

- No signs of patella instability
- Normal gait mechanics
- Good quad strength

Phase 4 Sports Specific Training Months 5-6

Goals

- Return to sports safely

Therapeutic Exercises

- Continue all of the above
- Full squats to 90 degrees of knee flexion
- Leg press 0-90 degrees
- Agility drills
 - Single and double leg jumps
 - Teach the 3 L's
 - Soft **L**anding
 - Stay **L**ow while running and jumping (knees flexed not extending)
 - Keep knees in **L**ine with feet at all times including landing from jump
- Sport specific training

Return to sport is expected between 6 and 12 months depending on individual progression

- Must display confidence in knee function and patella stability
- Must display adequate strength (operative leg must have 90% strength of non-op leg with single leg press)
- Must display 85-90% of single leg hop test