

Knee Fulkerson Osteotomy +/- MPFL Physical Therapy Protocol



Dr. Christopher Ellingson

Phase I: Weeks 0-6 Maximum Protection Phase

GOALS

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

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

RANGE OF MOTION

- Weeks 0-2: 0°-30°
- Weeks 3-4: 0°-90°
- Weeks 5+: Advance to full range of motion as tolerated

THERAPEUTIC EXERCISES

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

CRITERIA FOR PROGRESSION

- Cleared by physician

- Flexion to 100°
- Good quad control and able to do unassisted straight leg raise

Phase II: Weeks 7-10 Beginning Functional Rehabilitation

GOALS

- Obtain full range of motion
- Improve quad control
- Continue to protect repair avoiding valgus stress and lateral movements

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°
- Core body training

CRITERIA FOR PROGRESSION

- Able to perform SLR without extensor lag
- Normal gait

*If you have any problems or questions,
please call your doctor's office (8am-5pm).*

Answering service for after hours.

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- Able to perform squat from 0°-45° with good control and no pain

Phase III: Months 3-4 Advanced Functional Rehabilitation

GOALS

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

WEIGHT BEARING

- Continue with patella stabilization brace

THERAPEUTIC EXERCISES

- Continue with all of the above exercises
- Leg press 0°-45° 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 PROGRESSION TO SPORTS-SPECIFIC TRAINING

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

Phase IV: Months 5-6 Sports-Specific Training

GOALS

- Return to sports safely

THERAPEUTIC EXERCISES

- Continue all of the above
- Full squats to 90° of knee flexion
- Leg press 0°-90°

- Agility drills
- Single and double leg jumps
- Teach the 3 Ls:
 - 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

CRITERIA FOR PROGRESSION

RETURN TO SPORT IS EXPECTED BETWEEN 6-12 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