

# Rehabilitation Guidelines for Multilig Knee Reconstructions

## Weeks 0-2

- Brace: brace 0-90 degrees, locked in extension when ambulating; worn 24 hours per day
- Flat foot feather touch weight bearing with crutches
- ROM: Prone or supine assisted knee flexion 0-90 degrees with proximal tibia protected against gravity, no hyper extension
- Patella mobilization – medial/lateral and inferior/superior glides
- Exercise Suggestions: NO ACTIVE HAMSTRINGS/ FLEXION X 6
- Isometric Quad contractions, gluteal activation (supine or standing), isometric hip adduction/abduction, ankle pumping Modalities: Ice, compression and analgesics as needed to reduce pain and swelling

## Weeks 2-6

- Maintain brace unlocked 0-90
- Flat foot partial weight bearing with crutches ROM:
- Prone or supine assisted knee flexion 0-90 degrees with proximal tibia protected against gravity
- Patella mobilization – medial/lateral and inferior/superior glides
- Exercise Suggestions: NO ACTIVE HAMSTRINGS/KNEE FLEXION X 6 WEEKS
- Isometric Quad contractions (+/- muscle stimulation)
- Gluteal activation (supine or standing), isometric hip adduction/abduction, ankle pumping
- Progress to mini squats, 0-30 degrees with brace on (can weight bear as tolerated during this exercise)
- Non-weight bearing hip stability exercises: abduction, extension, external rotation, clam shells, supine bridging on swiss ball
- Ankle theraband plantar flexion, sitting calf raises Modalities: Ice, compression and analgesics as needed to reduce pain and swelling

## Weeks 6-12

- Weight bear as tolerated until normal heel toe gait ROM:
- Full range of motion
- Patella mobilization – medial/lateral and inferior/superior glides
- Exercise Suggestions: CAN START ACTIVE HAMSTRINGS/KNEE FLEXION IN OSSUR PCL REBOUND BRACE (if not in rebound brace keep hamstrings quiet until 12 weeks post op) • Gait retraining

- Quadriceps isometrics in long sitting, standing (+/- muscle stimulation)
- Weight shifting: 2 weigh scales → 50-50WB
- Leg extension (or quad over roll), active terminal knee extension with theraband
- Initiate abdominal and core strengthening (i.e. curl-ups, transversus abdominis with SLR x4)
- Standing hip flexion/extension, abduction/adduction → weights/pulleys/bands (watch for excessive trunk shift/sway)
- Shuttle™/leg press: 2 leg squat/calf raises, progress 2-1 leg; increase ROM & resistance
- Mini wall squats (30-60°) → 60°-90°; sit to stand
- Calf raises 2→1 foot, up on toes walking (when full weight bearing)  
Modalities: Ice, compression and analgesics as needed to reduce pain and swelling
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### Months 3-6

- Weight bear as tolerated ROM:
- Full range of motion Exercise Suggestions:
- Bike pendulums: ½ circles forward/backward ◊ full circles – lower seat as tolerated
- Supine bridging: 2◊1 leg ◊swiss ball◊ bridge + knee flexion
- Hamstring curls: prone, sitting◊progress 1-2 lb weights
- Continue core strengthening functionally (i.e. obliques, planks, Pilates)
- Sit to stand → lower bed height (watch mechanics) ◊single leg
- Progress resistance of Shuttle™working on strength & endurance, 2◊1 leg
- Continue hip strengthening: weights, pulleys, tubing
- Static Lunge → dynamic lunge (with proper alignment: shoulders over knees over toes) ◊ lunge walking as pain free range tolerates
- Progress to Low resistance stationary bike
- Wobble boards with support: side-to-side, forward/backward
- Single leg stance 30-60 seconds (when full WB)
- May begin jogging / running program once regained full range of motion with a quiet knee and appropriate neuromuscular control