

## Knee Arthroscopy

### (Debridement of Partial Menisectomy)

**Precautions:** The patient will ambulate with crutches (and immobilizer if prescribed) and WBAT unless instructed otherwise by physician. The patient may discontinue crutches when he/she can ambulate securely, has no evidence of instability, has appropriate quad strength, and can perform a normal gait pattern.

#### Phase I (1 - 5 days post-op)

- Wound care: Observe for signs of infection
- Modalities: prn for pain and inflammation (ice, IFC)
- Brace: If prescribed
- ROM: Pain-free ROM and gradually achieve full extension
- Exercises: Quad sets, SLR, heel slides

#### Phase II (5 days – 4 weeks post-op)

- Wound care: Continue to monitor for signs of infection and begin scar management techniques when incision is closed
- Modalities:
  - NMES if unable to perform quad sets and positive extensor lag during SLR
  - Continue ice/game ready and IFC for pain and inflammation
  - sEMG neuro-muscular re-education for quad
- Brace: D/C brace (if prescribed) by 5 days
- Gait
  - D/C crutches as soon as quad strength and pain allow
  - Normalize gait pattern on level surfaces and progress to step-over-step pattern on stairs
- ROM:
  - 2 weeks: minimum of 0-90 degrees, not more than 120 degrees
  - 4 weeks: achieve full AROM, if pain allows
  - Passive positional stretches of knee extension and flexion
  - Heel slides/Standing knee flexion
  - Full revaluations on stationary bike
  - Increase/maintain patellar mobility with emphasis on superior glide
- Strengthening
  - Quad sets (open and closed chain at multiple angles)
  - SLR (eliminate extensor lag)
  - Hip strength
  - Until 3 weeks: closed chain strengthening only, no open chain
  - Proprioception activities(Initially bilateral and transition to unilateral as strength and pain permit)

- o Post-op 3 weeks: begin open chain strengthening without pain (Only if no concern for ACL injury or patellofemoral compression)

### **Phase III (4 – 10 weeks post-op)**

- Wound care: Continue to monitor
- Modalities: Continue prn
- ROM: Emphasize full extension
  - o Patellar mobility
  - o Rectus femoris/hip flexor/hamstring/IT band stretches
- Strengthening:
  - o Continue Phase II with progression of resistance
  - o Initiate jumper for leg presses and eventually transition from jumper to weighted leg press
  - o Treadmill forward and retro. Transition to jog after 6 weeks for athletes, if no pain
  - o Add work simulation tasks (material handling, step heights, push/pull, etc)
- Conditioning:
  - o Stepper
  - o Treadmill increasing to a power walk
  - o Stationary bike
  - o UBE
  - o Pool, if available
- Testing: Initial Functional Testing prior to 6-8 week physician follow-up appointment

### **Phase IV (10+ weeks post-op)**

- Wound care: Continue scar mobs
- Modalities: Continue prn
- ROM: full ROM
- Strengthening: Increase weights and reps of previous exercises
- Conditioning and Agility:
  - o Increase to running on treadmill (Initially supervised by therapist)
  - o Jump downs progressing to plyometrics
  - o Gradual to sport specific/work specific drills and exercises
- Testing: Final Functional tests <25% deficit for non-athletes and <20% for athletes
- Initiate work conditioning for job related tasks. Follow-up with school ATC to continue sport specific training and skills

Adapted from:

- 1) Brotzman SB, Wilk KE. Clinical Orthopedic Rehabilitation Second Edition. Philadelphia: Mosby; 2003