

# Geoffrey S. Van Thiel, MD/MBA

www.VanThielMD.com gvanthiel@rockfordortho.com

## **Knee Arthroscopy**

(Debridement or Partial Meniscectomy)

#### **Precautions:**

The patient will ambulate with crutches (and immobilizer if prescribed) and weight bearing as tolerated <u>unless instructed otherwise by physician</u>. 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: Remove dressing after 48 hours. Place band-aids over the portal sites. OK to shower at 48 hours after surgery. No hot tubs or bathtubs.
- Modalities: prn for pain and inflammation (ice, IFC)
- Brace: none. D/C crutches as soon as patient is able to walk.
- 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: Remove dressing after 48 hours. Place band-aids over the portal sites. OK to shower at 48 hours after surgery. No hot tubs or bathtubs. Continue to monitor for signs of infection and begin scar management techniques when incision is closed.
- Brace: D/C of crutches as soon as quad strength and pain allow
- Gait:
- Normalize gait pattern on level surfaces and progress to step-over-step pattern on stairs
- ROM: Goal: Minimum 0 90 degrees at 2 weeks, not more than 120 degrees; gradually achieve full AROM by end of 4 weeks if pain allows.
  - o Passive positional stretches for extension and flexion
  - o Heel slides/ standing knee flexion
  - o Half revolutions on stationary bike and progress to full revolutions
  - o Increase / maintain patellar mobility with emphasis on superior glide
- Strengthening:
  - O Quad sets (open and closed chain multi angle)
  - o SLR (eliminate extensor lag)
  - o Hip strength
  - o Closed chain strength initially
  - Open chain at post op week 3 or when able to perform without pain with light wt.
  - o Proprioception activities (bilat. initially and transition to single leg as strength and pain permit)

- Modalities:
  - o NMES to quads if unable to perform quad sets and extensor lag with SLR
  - o Continue ice and IFC for pain and inflammation prn
  - o sEMG neuro-muscular re-education for quad
- Conditioning:
  - o UBC
  - O Stationary bike with the well leg (full revolutions and speed)

## 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 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.
  - Treadmill forward and retro gradual increase to jog with athletes after 6 weeks if no pain.
  - o Add work simulation tasks (material handling, step heights, push/pull etc.).
- Conditioning:
  - o Stepper (retro and/ or forward)
  - o Treadmill increasing to a "power walk"
  - o Stationary bike
  - o UBC
  - o Pool if available
- Testing: Initial Functional Testing prior to 6 8 week MD follow-up appt.

### Phase IV: (10+ weeks post-op) (if needed)

- Wound care: Continue scar mobs
- Modalities: continue prn
- ROM: Full ROM
- Strengthening:
  - o Increase weights and reps of previous exercises
- Conditioning and Agility:
  - o Increase to running on treadmill (supervised by therapist first)
  - 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, < 20% for athletes
- Initiate work conditioning for job related tasks. Follow up with school athletic trainer to continue sport specific training and skills.