

### GEOFFREY S. VAN THIEL, MD/MBA

Assistant Professor - Rush University Medical Center Team Physician - US National Soccer Teams Team Physician - Chicago Blackhawks Medical Network - Ice Hogs

www.VanThielMD.com - VanThielMD@orthoillinois.com Fax: (815) 381-7489 - Phone: (815) 381-7365

### SPORTS MEDICINE SURGERY – HIP ARTHROSCOPY

Follow us on Twitter and Facebook: @VanThielMD & Facebook.com/VanThielMD — Cutting edge information on the arthroscopic treatment of the hip, knee and shoulder —

## REHABILITATION PROTOCOL

# Meniscus Repair

Precautions: Foot flat weightbearing (25%) for 4 weeks with ROM restricted to 90 degrees of flexion.

Goals: control inflammation/effusion, allow early healing, full passive extension, independent quad control.

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

- Wound care: Remove dressing at 48 hours after surgery. Place Band-aids over portal sites. OK to shower at 48 hours. If an incision was made on the side of the knee with an inside out meniscus repair, leave dressings in place for 5 days and keep dry.
- Modalities: prn for pain and swelling (ice, IFC)
- Gait and Brace: Foot flat weightbearing (25%). Brace locked in 0 degrees extension X 4 weeks for all WB and ambulation
- ROM: 0-90 by 4 weeks and progress to 120 by 6 weeks. Do not force ROM
- Strengthening:
  - o Quad sets
  - o Hamstring, gastroc, and soleus stretches NWB
  - Hip abd/add isometrics
  - Avoid active knee flexion (semiembranosus insertion on posterior medial meniscus), heel slides completed passively

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

• Wound care: Monitor wound site and begin scar management techniques when incision is closed. Remove dressing at 48 hours after surgery. Place Band-aids over portal sites. OK to

shower. If an incision was made on the side of the knee with an inside out meniscus repair, leave dressings in place for 5 days and keep dry.

- Modalities: continue prn
- Gait and Brace: same as Phase 1. Brace may be removed for all NWB exercises
- ROM: Same as Phase 1
- Strengthening: Continue Phase 1 exercises. Progress to include:
  - o Active heel slides progressing to prone knee flexion or standing knee flexion without resistance. (Caution if posterior medial meniscus repair)
  - o SLR x 4 directions beginning in supine with brace if needed. Brace on if standing.
  - o SAQ including mutli-angle quad isometrics
  - o BAPS: Begin seated; progress to standing.
  - o Ankle resistance with Theraband

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

- Gait and Brace:
  - o At 4 weeks, progress to FWB with brace set at 0 -120 degrees.
  - Wean out of brace after 6 weeks
- ROM: Progress to 0 120 degrees by 6 weeks. do not force ROM
- Strengthening:
  - Cardiovascular exercise without resistance: Stationary cycle and/or seated stepper.
     May begin Treadmill ambulation when patient is able to demonstrate normal gait pattern.
  - o Closed-chain exercises: Caution: Limit knee ROM 0-60 degrees. Keep knee & Lower
  - o Extremity in neutral hip position.
    - Mini squats
    - Partial wall sits
    - Leg press
    - Step Up exercises
    - Partial lunges
    - 4 way hip with resistance
    - Tilt board balance
    - Proprioceptive training and single leg balance
    - Terminal knee extension with band
  - o Hip and core strengthening
  - Pool program

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

- Gait: Independent ambulation without knee brace or assitive device
- ROM: Full AROM
- Strengthening: Progress knee ROM 0-90 degrees for strengthening activities
  - o Closed Chain Exercises: Progress squats and leg press 0 -90 degrees
  - o Progress Core, hip and overall endurance training
  - o Sport specific Training/agility activities:
    - begin with low velocity, single plane activities and progress to higher velocity, multi plane activities
    - strength, balance and control drills related to sport specific movements
  - o Treadmill: Begin running, per M.D.
- Testing: final functional tests less than 25% deficit for non-athletes, less than 20% deficit for athletes