

**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**

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– Cutting edge information on the arthroscopic treatment of the hip, knee and shoulder –

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**REHABILITATION PROTOCOL**

**Protocol for Non-Operative Treatment of PCL Tears**

**Precautions:**

- Avoid greater than 90° of knee flexion for the first 6 weeks post injury.
- If greater than 90° of knee flexion is performed, this **MUST** be done with an anterior drawer force to prevent posterior subluxation.
- Posterior knee pain may mean the patient is progressing too quickly.

**Guidelines:**

- Must be highly individualized.
- Quadriceps strength is related to return to sport and patient satisfaction.
- Protect the patellofemoral joint.
- Avoid open-chain knee flexion exercises. Utilize closed-chain exercises to enhance function of hamstrings.
- Early considerations: Quadriceps sets, straight leg raises, biofeedback, electrical stimulation for quads.
- Muscle function:
- Open chain knee extension: 90-60° and 20-0°
- Closed chain: Mini-squats, wall slides, step-ups, leg press/squat

**Phase I - Day 0-10:**

- Range of motion: 0 – 60 degrees
- Effusion: Ice, elevation, NSAIDs
- Gait/Weightbearing: Protected weightbearing (50%) with crutches.

- Exercise: Isometric quadriceps when pain permits
- **Avoid open chain hamstring strengthening exercises**

### **Phase II - Day 10-21:**

- Range of motion: Early range of motion within limits of pain: Active-assisted and passive range of motion less than 60°. Can increase to 90° of knee flexion, this MUST be done with anterior drawer force protecting the knee.
- Effusion: Ice, elevation, NSAIDs, electrical stimulation
- Gait/Weightbearing: Weight bearing as tolerated with knee brace locked in extension.
  - Discontinue crutches when patient is able to and the effusion is controlled.
- Exercise: Isometric quadriceps when pain permits
  - Leg press 0-60 degrees.
- **Avoid open chain hamstring strengthening exercises**
- Avoid posterior tibial subluxation: Place a pillow under posterior aspect of lower leg when lying down.

### **Phase III - Weeks 3-5:**

- Range of motion: Progress as tolerated.
- Effusion: Ice, elevation, NSAIDs, electrical stimulation
- Gait/Weightbearing: Weightbearing as tolerated.
  - Discontinue the large hinged knee brace as tolerated.
  - Obtain a functional PCL brace.
- Exercise/Functional Training:
  - Focus on increasing strength and endurance of quadriceps.
  - Open chain knee extension exercises allowed IF no patellofemoral symptoms
  - Quadriceps sets and terminal knee extension.
  - May perform hip extension with knee extension.
  - No hamstring exercises with knee flexed.
  - Bike
  - Mini-squats 0-60 degrees
  - Leg press 0-60 degrees
  - Continue anterior drawer with knee flexion as above.

### **Phase IV - Weeks 5-8**

- Range of motion: Monitor
- Effusion: Monitor
- Gait/Weightbearing: As tolerated.
- Exercise/Functional Training:
  - Closed chain exercises to improve functional strength:
    - Mini squats
    - Wall slides
    - Step ups and leg press
    - Isotonic quadriceps progressive resistance exercises.
    - Proprioceptive training follows strengthening: Slide board

### **Phase V – Weeks 8-12**

- Begin a running program
- Gradual return to sport specific training

**Return to sports criteria:**

- Full pain-free knee extension
- Full pain-free knee flexion
- Quadriceps strength > 85% of contralateral side
- Continue PCL brace until full return to play with no effusion (remainder of season)