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Harbin Clinic Orthopaedic Surgery and Sports Medicine
Physical Therapy
Meniscal Repair
Post Operative Protocol

Phase I – Maximum Protection (Weeks 0 to 4):

0 to 1 Week:

- Brace locked in full extension for 4 weeks
- Use crutches for 7 to 10 days to reduce inflammation, then weight bearing as tolerated
- Ice and modalities to reduce inflammation and pain

Range of Motion

- 0° of knee extension
- 90° of knee flexion for 4 weeks

Exercises

- Patella mobility in all planes
- Passive/active knee range of motion with 90° flexion limit
- Quadriceps setting emphasize VMO function
- Multi-plane straight leg raising
- Gait training

Weeks 1 to 4:

- Continue with program as outlined in weeks 0 to 1

Range of Motion

- 0° to 90° limitation

Exercises

- Initiate open kinetic chain multi-plane hip strengthening; progress to closed kinetic chain as swelling and pain permit
- Begin pool program working on ROM and light strengthening once incisions are healed
- Begin proprioceptive training, avoiding rotation
- Manual PNF hip and ankle strengthening

Phase II – Progressive Stretching and Early Strengthening (Weeks 4 to 6):

Weeks 4 to 6:

- Continue with modalities to control pain and inflammation
- Open brace 0° to 90° for 2 weeks

Range of Motion

- Full knee extension/hyperextension
- Gradual progression to full knee flexion

Exercises

- Continue with phase I program
- Continue to emphasize patella mobility and quality VMO function
- Begin bilateral closed kinetic chain strengthening, gradually progressing to unilateral as swelling, pain, and neuromuscular function allow
- Begin stationary cycle- low resistance emphasizing endurance
- Gait training- normalize gait pattern
- Advance proprioception program

Phase III – Advanced Strengthening and Proprioceptive Phase (Weeks 6 to 12):

Weeks 6 to 8:

- Continue with exercises in phase I and II
- Wean out of brace over a 7 to 10 day period

Range of Motion

-Full knee range of motion

Exercises

- Patella mobility
- Terminal stretching in flexion and extension
- Advance stationary biking program (increase intensity), introduce treadmill walking and elliptical trainer
- Advance pool program, higher intensity strengthening

Weeks 8 to 12:

- Continue with program as outlined in weeks 6 to 8

Range of Motion

-Full knee ROM

Exercises

- Advance unilateral closed kinetic chain program
- Advance pool program
- Begin multi-directional functional cord program avoiding rotation (carioca)
- Increase intensity on stationary bike, elliptical trainer, and treadmill walking program, may begin interval programs
- Begin gym strengthening; squats, leg press, partial walk lunge, hamstring curls, ab/adduction, calf raises, and leg extensions (30° to 0° gradually increasing to full range of motion as patello-femoral arthrokinematics normalize)

Phase IV – Advanced Strengthening and Plyometric Drills (Weeks 12 to 16):

Weeks 12 to 16:

- Begin pool running program, no bounding or jumping
- Continue to advance overall strength and conditioning program, emphasize unilateral work with gym program

Phase V – Return to Sport Phase (Weeks 16 to 24):

Weeks 16 to 20:

- Begin straight plane running; emphasize distance and endurance

Weeks 20 to 24

- Begin sprinting program
- Begin multi-directional drills
- Plyometric drills from bilateral to unilateral
- Follow-up examination with the physician
- Sports test for return to play