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BONE·JOINT·SPINE·MUSCLE

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Medial Patellofemoral Ligament Reconstruction/Repair Rehabilitation Protocol

Description of Procedure: The medial patellofemoral ligament (MPFL) is reconstructed by securing a free hamstring tendon graft from the patella to the anatomic femoral attachment site (between the medial epicondyle and adductor tubercle). This anatomic positioning allows the attachment sites to become closer during flexion (loosening of the graft), which allows early full range of motion. A repair either reattaches the original ligament or tightens a pathologically lax MPFL.

Safety Warning: Surgery on the medial aspect of the knee, at times, has a higher incidence of scarring. Therefore, aggressive early full flexion is important along with quadriceps re-education.

Phase I (Weeks 0 to 6)

Weight Bearing

- Weight bearing as tolerated once a straight leg raise can be performed without extension lag with the use of two crutches
- Progress to one crutch as tolerated then full weight bearing with normalized gait pattern; no limping

Brace

- Brace is worn when ambulating until independent straight leg raise can be performed without extension lag

Range of Motion

- The goal is to achieve active range of motion as soon as tolerated

Therapeutic Exercise

Weeks 0 to 2

- Prone hangs, heel props, heel slides, quad sets, straight leg raises, hamstring isometrics
- Complete exercises in brace if quad control is inadequate
- Core proximal program; normalize gait; functional electrical stimulation biofeedback as needed

Incorporate use of stationary bike (high seat, low resistance) and patellar mobilization exercises after suture/staple removal.

Weeks 2 to 6

- Continue heel props and prone hangs
- Begin wall slides - mini dips; heel raises; leg press (90 to 40 degree arc, starting with eccentric and light weights); step-ups (three to six inches); isometrics
- Core muscle development program

Phase II (Weeks 6 to 12)

Weight Bearing

- Full weight bearing with normal gait

Brace

- None

Range of Motion

- Full active range of motion

Therapeutic Exercise

- Begin walk to jog program (straight ahead or on track)
- Increase endurance and strength
- Continue core exercise program
- Closed kinetic chain program

Phase III (Week 12 and Beyond)

Weight Bearing

- Normal gait

Brace

- None

Range of Motion

- Full active range of motion

Therapeutic Exercise

Progression A

- Straight line running/exercise
- Decreased swelling with activity
- Full range of motion maintained

Progression B

- Easy cutting activities; advance strengthening
- Sport/activity specific agility drills; begin functional exercise activities
- Quadriceps isotonics, progress endurance activities

Progression C

- Begin sport/activity specific functional progression
- Return to full participation in sport once strength is 90% strength on single leg hop test or high velocity isometric test is accomplished **and** functional progression back to sport have been accomplished without pain or increased swelling
- Provide home exercise program and instruction on functional training

Caution for eight weeks post-operatively with twisting or pivoting with normal daily activities.

Progression back to sport is dependent on case per case basis and determined by Dr. Lavery.
If pain or swelling occurs patient is expected to stop causative activity and follow-up with our office.