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**Fellowship Trained in Sports Medicine**

**Medial Patellofemoral Ligament Reconstruction Protocol**

This rehab protocol was created from a review of protocols for patients who are status post medial patellofemoral ligament reconstruction or MPFL. This protocol should be used only as a guideline as time frames may vary from patient to patient. Notify physician immediately if the patient is not progressing appropriately.

Weeks 0-6

* Follow brace recommendations as per MD
* Progress from WBAT using brace/crutches to FWB
* Control swelling
* Protect fixation
* Regain quad control
* Minimize stiffness at knee joint and quickly notify physician if patient is not progressing appropriately

Phase I Weeks 1-3

* Flexibility/ROM

I. Gastroc/soleus stretches

2. Gentle hamstring stretches

3. Ankle pumps

4. Heel slides

5. Manual therapy

6. Teach patient patellar mobilization avoiding lateral glide

* Strength

I. Isometrics @ O deg, 45 deg, and 90 deg

2. 4 point: SLR w/ ERF Hip Abd w/ ER, Hip add, Hip ext(Use brace if patient has poor quad control)

3. Resisted ankle 4 way

4. Weight shifts

5. UBE

6. Upper body training

* Modalities

1. Biofeedback to help with quad achieve quad control
2. Ice.

Phase II weeks 4-6

* Flexibility/ROM

1. ITB stretching

2. Hip flexor stretching

3. Scar tissue mobilization

* Strength

I. Standing hip 4 way w/ light resistance

2. Leg press(NO flex>45 deg)

3. Total gym/Mini squats/Wall squats(NO flex >45 deg)

4. TKE in standing

5. Prone hamstring cur's/carpet drags/roliing stool

6. Step ups

7. Heel raises

8. SAQ as tolerated

9. Core strengthening (i.e. planks, side planks, bridging, SL bridging, clamshells, etc.

* Cardiovascular

1. Stationary bike (begin w/ partial revolutions)

2. Treadmill walking (Fwd, retro)

3. Pool jogging (once incisions have fully healed)

* Proprioception

1. Wt. shifts progressing to single limb stance

2. Double leg BAPS progressing to single leg

3. SIS w/ foam, Star drill, ball toss on trampoline

* Modalities

1. Russian/NMES

Phase III Weeks 7-12

* Flexibility/ROM

1. Continue previous exercises to reach full knee AROM

* Strength

I. Fwd, lateral, retro, quad eccentric step downs

2. Fwd lunge/side lunge

3. Weight machine for leg extension/leg curl/hip 4 way

4. BOSU/balance board squats

5. Single leg calf raises

* Cardiovascular

I. Stairmaster

2. Pool running

* Proprioception

1. SIS on BOSU/balance board

Phase IV Weeks 3 – 6 months / Progress to sport

* Running progression(no running back to back days) – 3 months

1. Treadmill: Walk/jog intervals

2. Treadmill: Running

3. Track: Run straight/walk turns

4. Track: Running laps

5. Road running

* Agility drills – 4 months

I. Ladders

2. Fwd, backward, side to side shuttle sprints

3. Stop and go

4. Lateral shuffles

5. Cutting/pivoting

6. Carioca

* Jumping – 5 months

1. Box jumps

2. Fwd, backward, side-side jumping

3. Drop vertical jump

4. Single limb hop for distance

5. Single leg triple hop

6. Single leg cross over hop