

MPFL Ligament Reconstruction with Allograft

Rehab Considerations: Patients will utilize a brace that will be locked at 0 deg during all weight bearing activities for the first 2-4 weeks depending on quadriceps strength. Progress ROM as follows:

- Week 0-1: 0°
- Weeks 1-3: 0°→90°
- Weeks 3-4: 0°→100°
- Weeks 4-5: 0°→110°
- Weeks 5-6: 0°→120°
- Weeks 6-8: Full painfree ROM

Phase I (0-4 weeks)

Weight Bearing: Brace locked when ambulating. Unlock brace for weight bearing depending on quad control (2-4 weeks)

- o Flexibility: hamstrings, gastroc, hip flexor.
- o Strength: quad sets, SLR 4-ways, TKE against T-band, NMES for quad/vmo reeducation
- o Gait training with cups (wks 2-4) to facilitate improved knee flexion in swing phase.
- o Balance/Proprioception exercises per weightbearing status.
- o Pain control: cryotherapy

Phase II (4-6 weeks)

Weight Bearing: 100% weight-bearing without crutches (depending on quad control)
- D/C Brace (week 6)

- o Bike, elliptical
- o Manual therapy: scar mobilization, patellar mobilizations (avoid lateral glides)
- o Flexibility: Hamstrings, gastroc, hip flexor, ITB.
- o Strength: wall slides, hamstring, heelraises, SLR 4 ways. Open kinetic chain knee extension from 0°→45° (6 weeks). Treadmill walking program.
- o Gait training: if continued lack of knee flexion in swing phase.
- o Balance/Proprioception: Double limb BOSU, single leg stance on solid surface progressing to conforming surfaces.
- o Pain control: cryotherapy for pain control as needed.

Phase III (6-12 weeks)

Weight Bearing: No restriction

- o Bike, elliptical, stepper
- o Flexibility exercises: hamstring, gastroc, hip flexor, ITB
- o Strength: OKC knee extension (progress 0°→90° at week 8), hip strengthening,

heelraises, step-ups, step downs (eccentrics), lunges, squats, leg press, ambulate against resistance.

o Balance/Proprioception: Continue with progressions double limb→single limb, solid surface→conforming surfaces, predictable→unpredictable (perturbations).

o Initiate Treadmill jogging program. (week 12-16)

Running progression

1. Treadmill walking
2. Treadmill walk/run interval
3. Treadmill run
4. Track: run straits, walk turns
5. Track: run straits and turns
6. Run on road

*Progress to the next level when patient is able to perform activity for 2 miles without increased pain or effusion. Perform no more frequently than every other day. Do not progress more than 2 levels in a day period.

Phase IV (months 4-6)

Agility drills/plyometrics

Transition to home gym program

Progress running program in regards to distance and speed.

Anticipate return to sport at 5-6 months.