

MENISCUS ALLOGRAFT TRANSPLANT REHABILITATION PROTOCOL

This protocol is a general outline. "As tolerated" refers to no increased sharp pain, swelling, or other undesirable factors. If any of these occur, decrease activity level and ice. Progression and return to sport may vary between individual patients, and will be guided by your provider's team (physician, physician assistant, athletic trainer, and therapist) input and appropriate testing. The following weight bearing, brace and range of motion guidelines are dependent upon your specific meniscus repair and will be reviewed with you at your first post-operative visit.

PHASE I: WEEKS 0-2

Weight-bearing:

- Touchdown weight bearing x 4 weeks followed by partial weight bearing for 2 weeks.

Brace:

- Knee Immobilizer until first post-op visit
- If MCL fenestration performed during surgery:
hinged knee brace for 4 weeks
- No brace

Range of Motion (ROM):

- 0-90 for 6 weeks
- Maintaining full knee extension

Therapeutic Exercises:

- Quad sets, hip/glute strengthening (4-way SLR)
- Weight bearing strengthening based on restrictions listed above
- Ankle/foot stretching and strengthening

Manual Therapy and Modalities:

- Scar, soft tissue, and patellar mobilizations
- Cryotherapy (ice), compression, e-stim

Stationary Bike:

Resistance free at 2 weeks, then progress resistance starting at week 4

Progression Criteria:

- Full passive knee extension
- Minimal joint effusion
- Appropriate progression of ambulation based on restrictions

PHASE II: WEEKS 4-8

Weight-bearing:

- Follow Phase I restrictions

Brace:

- For those with hinged knee brace - discontinue

Range of Motion (ROM):

- 0-90 for 6 weeks
- Maintaining full knee extension

Therapeutic Exercises:

- Gait & balance training following weight bearing restrictions
- Eccentric quad strengthening
- Closed kinetic chain (CKC) strengthening in pain-free ROM *not passed 90° knee flexion
- Open kinetic chain (OKC) knee flexion and extension *not passed 90°
- Hip/glute strengthening (4-way SLR, band walks, step ups, step downs, bridges, etc.)
- Core strengthening
- Stationary bike – advance to resistance as tolerated

Manual Therapy and Modalities:

- Scar, soft tissue, and patellar mobilizations
- Cryotherapy, compression, e-stim as needed

Progression Criteria:

- Knee ROM 0°-120°
- Minimal effusion
- No pain or limp
- Good quad strength

PHASE III: MONTH 2-4

Range of Motion (ROM):

- Progress ROM to full

Therapeutic Exercises:

- Progress ROM and flexibility to full
- Closed Kinetic Chain (CKC) multi-plane activities
- Continue hip and core strengthening
- Continue gait and balance training
- Stationary bike
- NO impact activities until week 16

Manual Therapy and Modalities:

- Scar, soft tissue, and patellar mobilizations
- Cryotherapy, compression as needed
- Cryotherapy, compression as needed

Progression Criteria:

- No swelling
- No pain
- Full ROM

PHASE IV: MONTH 4-6

Therapeutic Exercises:

- Begin impact activities
- Continue with single leg strengthening & eccentric quad control
- Initiate running
- Box Drill- walk→jog→sprint progressing 4 cones from 5 yards apart to 10, 20 then 40 yards apart. Clockwise/counterclockwise
 - This can progress to more sport specific skills (i.e. dribbling basketball, kicking soccer ball)

MONTH 6-8: RETURN TO SPORT:

Therapeutic Exercises:

- Continue sport specific skills and drills
- Specific return to sport protocols may be found on our website under "Home Exercise Programs" with 14 sports that include sport specific skills and drill