

REHABILITATION GUIDELINES AFTER MENISCAL REPAIR

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The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course after a meniscal repair. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

INDIVIDUAL CONSIDERATIONS:

PHASE I (0-4 weeks)

Goals

- Control inflammation and pain
- Full active extension and 90 degrees of flexion
- Achieve quadriceps control

Brace

- Brace 0-90° for 6 weeks post-op
- Locked in extension for ambulation
- May remove for sleep after two weeks
- May remove for exercises

Weight-Bearing Status

- May weight-bear with knee immobilizer locked in full extension and crutches unless otherwise noted above
- May remove brace when good quad control obtained at 5-6 weeks

Restrictions

- No Running, Jumping, Squatting, Kneeling, or Pivoting

Therapeutic Exercises

- Straight leg raises in all planes (use brace locked in extension initially until quad strength is good enough to prevent an extension lag)
- Heel slides to <90 degrees of flexion, calf pumps, quadriceps sets
- Electrical stimulation
- Patellar mobilization
- Week 4+: Stationary bike (seat high, low tension)

PHASE II (5- 8 weeks)

Criteria to advance from Phase I→II

- Good quad set, straight leg raise without extension lag
- 90 degrees of knee flexion
- Full extension

Goals

- Progress weight-bearing
- Restore full range of motion

Brace/Weight-bearing status

- Week 6: Full weight bearing and discontinue brace as soon as normal gait pattern/quad control is achieved

Restrictions

- No Running, Jumping, Twisting, Kneeling, Pivoting, or Squatting>45°
- Limit flexion to 120 degrees

Therapeutic Exercises

- Mini-squats (0-45 degrees)
- Stationary Bike (high seat, low tension)
- Prone leg hangs
- Closed chain extension (leg press:0-45 degrees)
- Pool walking/jogging
- Toe raises
- Hamstring and gastroc/soleus stretches
- StairMaster

- *Proprioception*
 - Mini-tramp standing
 - Unstable platform (BAPS) with eyes open and closed
 - Standing ball throwing and catching

PHASE III (8-12 weeks)

Criteria to advance from Phase II→III

- Normal gait
- Full range of motion (avoid hyperflexion loading)
- Sufficient strength and proprioception to initiate functional activities

Goals

- Improve confidence in the knee
- Progress with strength, power, and proprioception

Restrictions

- No Jumping, Twisting, Kneeling, Pivoting, or Squatting >90°
- Limit Flexion to 120 degrees

Therapeutic Exercise

- Continue with flexibility exercises
- Advance closed chain kinetic strengthening (two-leg squats to <90 degrees, leg press 0-60 degrees)
- Avoid single-leg squats
- StairMaster, elliptical trainer, cross-country ski machine
- *Functional Training (6-12 weeks)*
 - Running
 - Straight ahead jogging, progress to running
 - Swimming
 - Avoid frog kick
 - Plyometrics
 - Stair jogging
 - Box jumps (6 to 12-inch heights)
 - Proprioception
 - Mini-tramp bouncing

- Lateral slide board
- Ball throwing and catching on unstable surface

PHASE IV (3 months+)

Criteria to advance from Phase III→IV

- Full, pain-free range of motion
- No patellofemoral irritation
- Sufficient strength and proprioception to progress to recreational activities

Goals

- Return to athletic activity by 4 months

Restrictions

- Avoid hyper-flexion and squatting >90°

Therapeutic Exercises

- Progress with flexibility and strengthening program
- Plyometrics for speed and power
- Continue running
- Incorporate cutting drills into agility training
- Advance heights with plyometric conditioning
- Sports specific drills (start a 25% on speed and advance as tolerated)

Criteria for Return to Sports

- Full range of motion
- No effusion
- 90% hamstring and quadriceps strength compared to contralateral side
- Clearance from doctor prior to return to sport

4 MONTHS Resume athletic activities

6 MONTHS Allow hyperflexion at this time