



Meniscus Repair Rehabilitation Protocol

PHASE ONE

Weeks 1-3

Following surgery, the patient will be placed in a ROM Brace which will be worn for at least 3 weeks.

PWB is allowed for the first 3 weeks.

PROM and AAROM 0-90° for 3 weeks.

EXERCISES

STRENGTH AND NM CONTROL

Quad sets with EMS or biofeedback –the more the better; 100X/day

SLR – 4 way

SAQ

LAQ

Seated hip flexion

Multi-hip

ROM

Heel slides – follow precautions!!!!

Hamstring and calf stretch – hold 30 sec

Prone hangs to gain full knee extension

MODALITIES

EMS or EGS if needed for quad facilitation or swelling, respectively

Ice following exercise and initially, every hour for 20 minutes

PHASE TWO

Weeks 3-6

ROM can now be progressed slowly as tolerated.

Deep flexion in a weight bearing position should NOT be performed.

Limit closed chain exercises to 90°.

The patient can d/c immobilizer and work towards a N gait pattern. *Crutches can be discharged when normal gait is achieved.

EXERCISES

STRENGTH

Quad sets are continued until swelling is gone and quad tone is good

SLR (4 way) add ankle weights when ready

Weight shifting – lateral; forward/backward

Shuttle/Total gym – (limit to 90°) bilateral and unilateral- focus on weight distribution more on heel than toes to avoid overload on Patella tendon

Multi-hip – increase intensity as able

Leg Press (limit to 90°)

Step-ups – forward

Step-overs

Wall slides (limit to 90°)

Mini-squats – focus on even distribution of weight

Calf raises

ROM

Goal is 0-125°

Patella mobilization – manual – especially superior and inferior

Perform scar massage aggressively at portals and incision

Heel slides – seated and/or supine at wall

Continue with HS and calf stretching

Bicycle – do not perform until 110° of flexion are achieved – do NOT use bike to gain ROM. Perform daily and increase resistance as able to work quad.

BALANCE

Single leg stance – even and uneven surface – focus on knee flexion

Plyoball – toss

Lateral cone walking with single leg balance between each cone

GAIT

Cone walking – forward and lateral

D/C crutches when N gait

MODALITIES

Continue to use ice following exercise

Continue with HEP daily

By end of this phase, the patient should ambulate with N gait I, have good quad control, controlled swelling, and be able to ascend/descend stairs.

PHASE THREE

Weeks 6-12

Goals for this phase are full quad control, good quad tone, and full ROM; patient should be able to perform N ADLs without difficulty.

Exercises will be advanced in intensity based on quad tone – a patient who continues to have poor quad tone must not be advanced to activities that require high quad strength such as squats and lunges

STRENGTH

Continue with above exercises, increasing intensity as able

Step-ups – forward and lateral; add dumbbells to increase I; focus on slow and controlled movement during the ascent and descent

Squats – Smith press or standing

Lunges – forward and reverse; add dumbbells or med ball

Hamstring curls

Single leg squats

Russian dead lifts – bilateral and unilateral

Single leg wall squats

Cycle – increase intensity; single leg cycle maintaining 80-100 RPM

ROM

Full ROM should be achieved

Continue with hamstring and calf stretch

Initiate quad stretch

BALANCE

Plyoball – toss – even and uneven surface

Squats on balance board/foam roll/airex

Steamboats – 4 way; even and uneven surface

Strength activities such as step-ups and lunges on airex

MODALITIES

Continue to use ice after exercise

Continue with HEP at least 3X/week

PHASE FOUR

Weeks 12-36

Continue with above strengthening program 3X/week focusing on increasing intensity and decreasing reps (6-10) for increased strength

Initiate lateral movements and sports cord: lunges - forward, backward, or side step with sports cord, lat step-ups with sports cord, step over hurdles.

Jogging

Plyometric program – bilateral progressing to unilateral

Plyos can include squat jumps, tuck jumps, box jumps, depth jumps, 180 jumps, cone jumps, broad jumps, scissor hops

Leg circuit: squats, lunges, scissor jumps on step, squat jumps

Power skipping

Bounding in place and for distance

Quick feet on step – forward and side-to-side – use sports cord

Progress lateral movements – shuffles with sports cord; slide board

Ladder drills

Swimming – all styles

Focus should be on quality, NOT quantity

Landing from jumps is critical – knees should flex to 30° and should be aligned over second toe. Controlling valgus will initially be a challenge and unilateral hops should not be performed until this is achieved.

Initiate sprints and cutting drills.

Progression: Straight line, figure 8, circles, 45° turns, 90° cuts

Carioca

Sports specific drills

Biodex test

Single leg hop test (90% of normal side)