O·S·M·S
ORTHOPEDIC & SPORTS MEDICINE SPECIALISTS

Green Bay • Fox Valley • Marinette

2223 Lime Kiln Road, Green Bay, WI 54311 • Phone: 920-430-8113 • Fax: 920-430-8124

osmsgb.com

Physical Therapy Protocol: MPFL Reconstruction

Philosophy:
Patellar realignment via MPFL reconstruction is a difficult task to accomplish surgically, and therefore a commitment to post-operative rehabilitation is necessary to achieve a desirable outcome. The surgical approaches vary by surgeon and even location, but the principles of therapy outlined here are generally accepted. A strong, pain-free knee with functional range-of-motion only comes about through an anatomic reconstruction of patellar tracking with aggressive (but appropriate) physical therapy performed with the therapist and at home.

Phase I, surgery to 6 weeks

OSMS appointments:
Medical appointments at 2 and 6 weeks
Films are taken to assess tunnels/implanted hardware
Physical therapy will begin as directed by your physician and as indicated on your physical therapy order

Rehabilitation Goals:
Protection of the post-surgical limb
Reduce swelling
Control pain
Restore leg control and normalize gait

Precautions:
Brace locked in extension for ambulation & sleeping x 2 weeks
ROM limitations as below
May unlock brace while sitting
Avoid active extension

Range-of-Motion Exercises:
Locked brace in extension x 2 weeks
0-30 allowed x 2 weeks, then
0-60 allowed x 2 weeks, then unlimited ROM allowed (while maintaining full extension)

Suggested Therapeutic Exercises:
Quadriceps sets
SLRs with brace on for hip strength
Ankle isotonics with bands
Begin pool walking at 4 weeks

Cardiovascular Exercises:

Upper body circuit training or upper body ergometer

Progression Criteria:

Patient may progress to phase II after 6 weeks if they have safe gait with brace unlocked
No effusion
0-90 Range of motion

Phase II, (after Phase I criteria met, usually at 6-12 weeks)

OSMS appointments:

Medical appointments at 6 & 12 weeks
Physical therapy appointments continue at once or twice weekly

Rehabilitation Goals:

Progressive squat program
Initiate step-down program
Leg press, lunges
Single leg standing control
No effusion
Short arc quad control and no pain with steps and partial squats
Good quadriceps control
Full ROM
Improve hip & core strength, balance & proprioception

Precautions:

Avoid post-activity swelling
Avoid closed chain exercises on land past 90
No running

Suggested Therapeutic Exercises:

Continue pool work
Gait drills
Functional single plane closed chain movements
Agility exercises (sport cord0
Balance and proprioceptive exercise
Single leg balance board

Cardiovascular Exercises:

Upper body circuit training or upper body ergometer
Swimming with flutter kick (no breaststroke)
Stair master
Water walking
Stationary bike

Versaclimber/NordicTrack

Progression Criteria:

Patient may progress to phase III after 2 weeks if they have met the above stated goals & have ormal gait on level surfaces

Good leg control without extensor lag, pain or apprehension

Single leg balance with 30 flexion greater than 20 seconds

Phase III, (after Phase II criteria met, usually after 12 weeks)

OSMS appointments:

Medical appointment at 12 weeks

Physical therapy appointments fade to every 10-14 days until cleared

Rehabilitation Goals:

Good eccentric and concentric neuromuscular control

Multiplane limb control

Return to work/sports (including impact)

Precautions:

Heat before exercise, ice after

Post-activity soreness should resolve within 24 hours

Suggested Therapeutic Exercises:

Begin forward treadmill running program when 8" step down satisfactory

Impact control exercises beginning 2 feet-2 feet, then 1 foot to other, and then 1 foot to same

Movement control exercise beginning with low velocity, single planar & progressing to higher velocity, multi planar

Sport specific balance and proprioceptive drills

Plyometric program

Hip and core strengthening

Return to sport is MD directed, generally >22 weeks