Endeavor Health
Orthopaedic & Spine Institute

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Meniscectomy Rehab Protocol

Phase	Precautions	Treatment Recommendations	Emphasize
Pre-Operative Phase *Criteria for Advancement:* *-Maximize ROM and flexibility in pain-free range* *-Maximize strength prior to surgery* *-Independent ambulation on level surfaces and stairs with appropriate assistive device* *-Patient able to verbalize/demonstrate post-operative plan of care*	▪ Avoid severe pain with ROM and strengthening exercises ▪ Modify or minimize activities that increase pain	▪ Patient education o Post-operative plan of care o Edema control o Activity modification o Gait training with expected post-operative assistive device o Basic home exercise program (HEP) ▪ Ankle pumps, quadriceps sets ▪ Straight leg raise PRE's- hip flexion, hip abduction, hip extension ▪ Seated knee flexion and extension AAROM ▪ LE flexibility exercises e.g. supine calf and hamstring stretches ▪ Passive knee extension with towel roll under heel ▪ Plantar flexion with elastic band or calf raises ▪ Gait training with appropriate pre-operative assistive device if needed ▪ Additional recommendations for patients attending multiple sessions pre-operatively o Edema control o ROM exercises e.g. seated knee flexion AAROM, supine knee extension PROM o LE flexibility exercises o LE progressive resistive exercises e.g. quadriceps sets, straight leg raises in multiple planes o Balance/proprioceptive training o Stationary bike	▪ Familiarization with post-operative plan of care ▪ Quadriceps contraction
Day of Surgery *Criteria for Advancement:* *-Independent ambulation with appropriate assistive device on level surfaces and stairs* *-Independent with transfers* *-Independent with HEP*	▪ Avoid painful activities: Prolonged sitting, standing, walking, and exercises that cause pain ▪ Do not put a pillow under the operated knee- keep extended while resting ▪ Avoid premature discharge of assistive device- until gait is normalized	▪ Transfer training ▪ Gait training with assistive device on level surfaces and stairs ▪ Patient education on edema control and activity modification ▪ Initiate and emphasize importance of HEP o Quadriceps sets, gluteal sets, ankle pumps, o Seated knee A/AAROM o Straight leg raise if able o Passive knee extension with towel roll under heel	▪ Control swelling ▪ Independent transfers ▪ Gait training with assistive device ▪ A/AAROM (emphasize extension) ▪ Emphasize quadriceps re-education (quadriceps sets)

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Phase	Precautions	Treatment Recommendations	Emphasize
Postoperative Phase I **Weeks 0-3** *Criteria for Advancement:* *-Swelling and pain controlled* *-Full passive knee extension* *-Passive knee flexion ≥ 120°* *-Unilateral weight bearing on involved LE without pain* *-Normal gait pattern without assistive device on level surfaces* *-Independent with HEP* *-Perform a pain free body weight squat without compensation (assisted as needed, i.e. counter, ball, TRX)* *-Ascend ≥6" step*	▪ Do not put a pillow under the operated knee- keep extended when resting and sleeping ▪ Avoid pain with exercises, standing, walking and other activities o Monitor tolerance to load, frequency, intensity and duration ▪ Avoid premature discharge of assistive device- should be used until gait is normalized ▪ Avoid forceful PROM	▪ Bike ▪ Gait training ▪ Modalities for pain and edema as needed ▪ Emphasize patient compliance with HEP and weight bearing precautions/progression ▪ Knee A/AAROM ▪ Patella mobilization ▪ LE flexibility exercises ▪ Muscle reeducation using modalities as needed ▪ Hip progressive resisted exercises ▪ Closed chain strengthening exercises e.g. leg press, squat, forward step up ▪ progression ▪ Proprioception training ▪ Consider blood flow restriction program with FDA approved device if cleared by surgeon and qualified therapist available ▪ Swelling and pain controlled ▪ Full passive knee extension ▪ Passive knee flexion ≥ 120° ▪ Unilateral weight bearing on involved LE without pain ▪ Normal gait pattern without assistive device on level surfaces ▪ Independent with HEP ▪ Perform a pain free body weight squat without compensation (assisted as needed, i.e. counter, ball, TRX) ▪ Ascend ≥6" step	▪ Normal gait pattern ▪ Patient compliance with HEP and activity modification ▪ Control of pain and swelling ▪ Total lower body functional strengthening
Postoperative Phase II **Weeks 4-8** *Criteria for Discharge (or Advancement if Return to Sport):* *- Full knee PROM* *-Minimal swelling* *-Ability to ascend and descend 8" stairs pain-free with good control and alignment* *-Independent with full HEP* *-Discharge OR move on to phase III if the goal is to return to sport*	▪ Avoid pain with therapeutic exercise and functional activities	▪ LE flexibility exercises ▪ Patella mobilization ▪ Progressive LE open kinetic chain exercises ▪ Functional progression of LE closed kinetic chain exercises, e.g. double leg squat to ▪ single leg squat and initiate forward step-down progression ▪ Progress proprioceptive balance training ▪ Cardiovascular endurance training e.g. bike, swimming, elliptical when able to perform 6" forward step up ▪ Initiate impact activities with progressive loading e.g. anti-gravity or underwater treadmill, bilateral to unilateral ▪ Progress HEP	▪ Eccentric quadriceps control ▪ Functional progression ▪ Normalize flexibility to meet demands of ADL's ▪ Establish advanced HEP/ gym home program

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Phase	Precautions	Treatment Recommendations	Emphasize
Postoperative Phase III Return to Sport *Criteria for Advancement:* *-Swelling and pain controlled* *-Full passive knee extension* *-Passive knee flexion ≥ 120°* *-Unilateral weight bearing on involved LE without pain* *-Normal gait pattern without assistive device on level surfaces* *-Independent with HEP* *-Perform a pain free body weight squat without compensation (assisted as needed, i.e. counter, ball, TRX)* *-Ascend ≥6" step*	▪ Avoid pain with therapeutic exercise and functional activities ▪ Avoid too much too soon- monitor exercise and activity dosing ▪ Don't ignore functional progressions ▪ Be certain to incorporate rest and recovery ▪ Protect tibiofemoral and patellofemoral joint from excessive load	▪ Initiate return to running program when able to descend 8" step without pain or deviation ▪ Advance proprioceptive balance training ▪ Advance LE strengthening ▪ Plyometrics progression ▪ Sport-specific agility training ▪ Increase endurance and activity tolerance ▪ Sport-specific multidirectional core retraining ▪ Progress total body multidirectional motor control exercises to meet sport-specific demands ▪ Collaboration with trainer, coach or performance specialist ▪ Patient education regarding self-monitoring of exercise volume and load progression ▪ Lack of pain, swelling and apprehension with sports-specific movements ▪ Quantitative assessments ≥ 90% of contralateral LE ▪ Movement patterns, functional strength, flexibility, motion, endurance, power, deceleration and accuracy to meet demands of sport ▪ Independent with gym or return to sport program	▪ Self-monitoring of exercise volume ▪ Self-monitoring of load progression ▪ Speed and power ▪ Agility, change of direction and deceleration ▪ Collaboration with appropriate Sports Performance expert

I hereby certify these services as medically necessary for the patient's plan of care.

_____ Date_____

Physician's Signature

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