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### Rehabilitation Guidelines for Meniscal Repair

The rehabilitation guidelines are presented in a criterion based progression. Specific time frames, restrictions and precautions are given to protect healing tissues and the surgical repair/reconstruction. General time frames are also given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehab compliance and injury severity. The size and location of the meniscal tear may also affect the rate of rehab progression.

Specific attention must be given to impairments that caused the initial problem. For example if the patient is s/p partial medial meniscectomy and they have a varus alignment, post-operative rehabilitation should include correcting muscle imbalances or postures that create medial compartment stress.

#### PHASE I (Surgery to 4 weeks)

APPOINTMENTS	Meet with physician within 10 days post op Begin physical therapy 3-5 days post-op, meet 1x week
REHAB GOALS	1. Protection of the post surgical knee 2. Restore normal knee extension 3. Eliminate effusion 4. Restore leg control
PRECAUTIONS	1. The patient may gradually wean from 2 crutches to 1 crutch to no crutches as long as the knee is in the locked ELS brace and there is no increase in pain for swelling for 4 weeks 2. ELS brace locked for all weight bearing activities for 4 weeks 3. Do not flex the knee past 90 degrees
RANGE OF MOTION EXERCISES	Knee extension on a bolster Prone hangs Supine wall slides to 90 degrees Heel slides to 90 degrees
SUGGESTED THERAPEUTIC EXERCISE	Quad sets SLRs 4 way leg lifts in standing with brace on for balance and hip strength
CARDIOVASCULAR EXERCISE	Upper body circuit training or UBE

PROGRESSION CRITERIA	<ol style="list-style-type: none"> <li>1. Pain free gait using locked brace without crutches</li> <li>2. No effusion</li> <li>3. Knee flexion to 90 degrees</li> </ol>
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### PHASE II (begin at 4 weeks)

APPOINTMENTS	<p>Meet with physician at 1 and 2 months post-op</p> <p>Physical therapy 1x every 1-2 weeks</p>
REHAB GOALS	<ol style="list-style-type: none"> <li>1. Single leg stand control</li> <li>2. Normalize gait</li> <li>3. Good control and no pain with functional movements, including step up/down, squat, partial lunge (staying less than 60 degrees of knee flexion)</li> </ol>
PRECAUTIONS	<ol style="list-style-type: none"> <li>1. No forced flexion – as in PROM flexion or weight bearing activities that push past 60 degrees of knee flexion</li> <li>2. Avoid post activity swelling</li> <li>3. No impact activities</li> </ol>
SUGGESTED THERAPEUTIC EXERCISE	<p>Non-impact balance and proprioceptive drills</p> <p>Stationary bike</p> <p>Gait drills</p> <p>Hip and core strengthening</p> <p>Stretching for patient specific muscle imbalances</p> <p>Quad strengthening – closed chain exercises short of 60degrees knee flexion</p>
CARDIOVASCULAR EXERCISE	<p>Non-impact endurance training; stationary bike, Nordic track, swimming, deep water run, cross trainer</p>
PROGRESSION CRITERIA	<ol style="list-style-type: none"> <li>1. Normal gait on all surfaces</li> <li>2. Ability to carry out functional movements without unloading affected leg or pain while demonstrating good control</li> <li>3. Single leg balance greater than 15 seconds</li> </ol>

### PHASE III (begin after meeting Phase II criteria~ 3 months)

APPOINTMENTS	<p>Meet with physician at 14-16 weeks post-op</p> <p>Physical therapy 1x every 1-2 weeks</p>
REHAB GOALS	<ol style="list-style-type: none"> <li>1. Good control and no pain with sport and work specific movements, including impact</li> </ol>
PRECAUTIONS	<ol style="list-style-type: none"> <li>1. Post-activity soreness should resolve within 24 hours</li> <li>2. Avoid post activity swelling</li> <li>3. Avoid posterior knee pain with end range flexion</li> </ol>
SUGGESTED THERAPEUTIC EXERCISE	<ul style="list-style-type: none"> <li>• Impact control exercises beginning 2 feet to 2 feet, progressing from 1 foot to other and then 1 foot to same foot</li> <li>• Movement control exercise beginning with low velocity, single plane activities and progressing to higher velocity, multi-plane</li> </ul>

	activities <ul style="list-style-type: none"> <li>• Strength and control drills related to sport specific movements</li> <li>• Sport/work specific balance and proprioceptive drills</li> <li>• Hip and core strengthening</li> <li>• Stretching for patient specific muscle imbalances</li> </ul>
CARDIOVASCULAR EXERCISE	Replicate sport or work specific energy demands
RETURN TO SPORT/WORK CRITERIA	1. Dynamic neuromuscular control with multi-plane activities, without pain or swelling