



*Orthopedic Surgery, Sports Medicine & Arthroscopy Specialists*

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### REHABILITATION PROTOCOL- Nonoperative Adductor/hip strain

The rehabilitation guidelines are presented in a criterion based progression program. Individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehab compliance, tissue quality and injury severity. Specific time frames, restrictions, and precautions may also be given to protect healing tissues and the surgical repair/reconstruction. The therapist should consult the referring physician with any questions or concerns.

### INDIVIDUAL CONSIDERATIONS

#### PHASE 1 (~0-4 weeks)

REHAB GOALS	<ol style="list-style-type: none"> <li>1. Minimize swelling &amp; pain</li> <li>2. Normalize gait</li> </ol>
PRECAUTIONS	<ol style="list-style-type: none"> <li>1. Crutches as needed if painful weight bearing</li> <li>2. Ice as needed for pain</li> </ol>
RANGE OF MOTION EXERCISES	<ul style="list-style-type: none"> <li>○ Soft tissue mobilizations/techniques as tolerated</li> <li>○ Passive ROM in pain free arcs</li> </ul>
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> <li>○ As above</li> <li>○ UE, core, trunk stability as pain tolerates</li> <li>○ Contralateral LE strengthening as tolerated</li> <li>○ Submax isometric adduction knees bent, progress knees straight, if pain free progress side lying adduction</li> <li>○ Balance/proprioceptive- double/single leg balance</li> <li>○ Non wt bearing hip progressive resistance exercises w/o weight in antigravity position (except abduction) pain free</li> <li>○ Sport specific- hockey stick handling while standing</li> </ul>
CARDIOVASCULAR EXERCISE	Stationary bike (low resistance, if pain tolerates)
PROGRESSION CRITERIA	<ul style="list-style-type: none"> <li>○ Pain free passive ROM</li> <li>○ Minimal swelling</li> <li>○ Concentric adduction against gravity without pain</li> <li>○ Normal gait</li> </ul>

#### PHASE 2 (~5-8 weeks)

REHAB GOALS	1. Progress strengthening, balance
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	<ol style="list-style-type: none"> <li>2. Obtain/maintain full ROM</li> <li>3. Minimize pain and swelling</li> </ol>
<b>PRECAUTIONS</b>	<ol style="list-style-type: none"> <li>1. Compression shorts as needed</li> <li>2. Ice as needed after activity</li> </ol>
<b>RANGE OF MOTION EXERCISES</b>	<ul style="list-style-type: none"> <li>○ Continue phase 1 exercises</li> <li>○ Gentle passive ROM of adductor &amp; hip flexors</li> </ul>
<b>SUGGESTED THERAPEUTIC EXERCISES</b>	<ul style="list-style-type: none"> <li>○ Continue phase 1 exercises</li> <li>○ Concentric adduction w/ weight against gravity, adduction standing cable column/theraband, seated adduction machine</li> <li>○ Balance/proprioception- single leg stance, balance board tosses</li> <li>○ Agility- quick steps, tic tock</li> <li>○ Lateral band walks, sumo squats, balance board squats, leg press, sliding board in frontal plane, lunges, unweighted split jumps</li> <li>○ Plyometrics- lateral shuffles</li> <li>○ Sport specific – skater strides</li> </ul>
<b>CARDIOVASCULAR EXERCISE</b>	<p>Continue phase 1</p> <p>Elliptical, stairmaster, swimming, treadmill long stride walking</p> <p>Forward/backward running- begin half speed, progress slowly as pain tolerates</p>
<b>PROGRESSION CRITERIA</b>	<ul style="list-style-type: none"> <li>○ Passive ROM equal to contralateral</li> <li>○ 75% adductor strength compared to abductors</li> </ul>

**PHASE 3 (~9-12 weeks)**

<b>REHAB GOALS</b>	<ul style="list-style-type: none"> <li>○ Progress strengthening &amp; LE drills</li> <li>○ Minimize pain, inflammation</li> </ul>
<b>PRECAUTIONS</b>	
<b>RANGE OF MOTION EXERCISES</b>	<ul style="list-style-type: none"> <li>○ Continue exercises from phase 2.</li> <li>○ Mobilizations/soft tissue technique as needed</li> </ul>
<b>SUGGESTED THERAPEUTIC EXERCISES</b>	<ul style="list-style-type: none"> <li>○ Continue exercises from phase 2</li> <li>○ Adductors- eccentric lengthened strengthening, ring squeezes, slide board side to side, standing resisted stride lengths on cable column</li> <li>○ Multi plane lunges</li> <li>○ Quick kick w/theraband, perturbation training</li> <li>○ Plyometrics- side to side bounding</li> </ul>

	<ul style="list-style-type: none"> <li>○ Sport specific- on ice kneeling adductor pull togethers</li> </ul>
<b>CARDIOVASCULAR EXERCISE</b>	Continue phase 2
<b>PROGRESSION CRITERIA</b>	<ul style="list-style-type: none"> <li>○ Full pain free active &amp; passive ROM</li> <li>○ No pain/swelling</li> <li>○ Adductor strength equal to contralateral &amp; at least 90% of abductor strength on involved side</li> </ul>

**PHASE 4 (~12+ weeks)**

<b>REHAB GOALS</b>	<ul style="list-style-type: none"> <li>○ No pain with sport activities</li> <li>○ Improvement of strength, endurance, neuromuscular control</li> <li>○ Return to sport/work</li> </ul>
<b>PRECAUTIONS</b>	<p>Post-activity soreness should resolve within 24 hours</p> <p>Avoid post activity swelling</p>
<b>RANGE OF MOTION EXERCISES</b>	<ul style="list-style-type: none"> <li>○ Continue with flexibility exercises from previous phase</li> </ul>
<b>SUGGESTED THERAPEUTIC EXERCISES</b>	<ul style="list-style-type: none"> <li>○ Continue phase 3 activities. Progress with resistance/load.</li> <li>○ Squats, dead lifts, cleans, snatches, split squats</li> <li>○ Sport specific- ice single limb stance</li> <li>○ Timed slide board slides</li> <li>○ Plyometrics- box jumps</li> <li>○ Sport specific drills when no pain/difficulty with activities of this phase</li> </ul>
<b>CARDIOVASCULAR EXERCISE</b>	Progress to baseline. Progress running
<b>PROGRESSION CRITERIA- RETURN TO SPORT</b>	<ul style="list-style-type: none"> <li>○ Full painless active &amp; passive ROM</li> <li>○ Symmetrical strength</li> <li>○ No pain/discomfort after activity</li> <li>○ Completion of sport specific program</li> <li>○ Physician clearance</li> </ul>