

## REHABILITATION GUIDELINES FOR QUADRICEPS TENDON REPAIR

### PHASE I (0-2 WEEKS)

DATES:

Appointments	<ul style="list-style-type: none"> <li>• Begin physical therapy 3-5 days post surgery</li> <li>• 2-3 x/week</li> </ul>
Rehabilitation Goals	<ul style="list-style-type: none"> <li>• Protect surgical repair</li> </ul>
Precautions	<p><b>WB:</b></p> <ul style="list-style-type: none"> <li>• WBAT with crutches and brace locked at 0° at all times</li> </ul> <p><b>Brace:</b></p> <ul style="list-style-type: none"> <li>• Brace must be worn at all times except during therapy or HEP</li> <li>• Keep wound clean and dry</li> <li>• PROM 0°-30°; DO NOT EXCEED</li> <li>• No active knee extension</li> </ul>
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> <li>• Straight leg quad sets ( no active knee extension)</li> <li>• Hamstring and glut sets</li> <li>• Patellar mobilizations</li> </ul>
Cardiovascular Exercises	<ul style="list-style-type: none"> <li>• Upper Body Ergometer</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>• 2 weeks post operatively</li> <li>• ROM 0-30 degrees</li> </ul>

### PHASE II (2-6 WEEKS)

DATES:

Appointments	<ul style="list-style-type: none"> <li>• Continue physical therapy 1-2x per week</li> </ul>
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(Phase II continued) Rehabilitation Goals	<ul style="list-style-type: none"> <li>Normalize WB with crutches with brace still locked in extension at all times</li> <li>Protect repair</li> </ul>
Precautions	<p><b>WB / Brace:</b></p> <ul style="list-style-type: none"> <li>WBAT in brace locked at 0° at all times</li> <li>Progress to 90 degrees knee flexion between 3-6 weeks</li> <li>Avoid active quadriceps extension</li> <li>Avoid hyperextension</li> </ul>
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> <li>Heel slides</li> <li>4 way leg raises with brace locked at 0°</li> <li>Patellar mobilizations</li> </ul>
Cardiovascular Exercises	<ul style="list-style-type: none"> <li>Upper Body Ergometer</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>6 weeks post operatively</li> <li>Must have 0° - 90°</li> </ul>

### PHASE III (6-12 WEEKS)

DATES:

Appointments	<ul style="list-style-type: none"> <li>Continue physical therapy 1-2x per week</li> </ul>
Rehabilitation Goals	<ul style="list-style-type: none"> <li>Normalize gait on even surfaces</li> <li>Initiate active quadriceps contraction in standing</li> </ul>
Precautions	<p><b>WB:</b></p> <ul style="list-style-type: none"> <li>WBAT, no crutches</li> <li>Gradual progression of WB flexion                             <ul style="list-style-type: none"> <li>- weeks 7-8: flexion to 115° (NO active quadriceps extension)</li> <li>- weeks 9-10: ROM 0° - 130° ( May now begin active quadriceps extension)</li> </ul> </li> </ul> <p><b>Brace:</b></p> <ul style="list-style-type: none"> <li>weeks 6-7: open to 40° without crutches</li> <li>weeks 8-10: open brace to 90°</li> <li>weeks 10-12 : wean out of brace</li> </ul>
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> <li>Open chain knee flexion and extension</li> <li>Closed chain squats: 0° - 40°; may use leg press</li> <li>May begin stationary bike</li> <li>Prone knee flexion</li> <li>Patellar mobilizations</li> </ul>
(Phase III continued)	

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	<ul style="list-style-type: none"> <li>• Open chain hip strengthening</li> <li>• Core strengthening</li> <li>• May begin aquatic therapy</li> </ul>
Cardiovascular Exercises	<ul style="list-style-type: none"> <li>• Upper body ergometer</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>• Normal gait mechanics without crutches</li> <li>• AROM of at least 0° - 110°</li> </ul>

### PHASE IV (12-16 WEEKS)

DATES:

Appointments	Continue physical therapy 1x per week
Rehabilitation Goals	<ul style="list-style-type: none"> <li>• Normalize gait on all surfaces</li> <li>• Single leg stance with good control for at least 10 seconds</li> <li>• Full knee ROM</li> <li>• Good control with squat to 70°</li> </ul>
Precautions	<ul style="list-style-type: none"> <li>• Avoid any forceful eccentric contractions</li> <li>• Avoid impact activities</li> <li>• Avoid any activity that causes compensatory movements</li> </ul>
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> <li>• Non impact balance and proprioceptive activities</li> <li>• Stationary bike</li> <li>• Gait drills</li> <li>• Hip and core strengthening</li> <li>• <b><u>After 16 weeks:</u></b> <ul style="list-style-type: none"> <li>- May begin jogging, elliptical, and plyometrics</li> <li>- Gradually progress to full WB ROM</li> </ul> </li> </ul>
Cardiovascular Exercises	<ul style="list-style-type: none"> <li>• Stationary bike</li> <li>• Stairmaster</li> <li>• Swimming</li> </ul>
Progression Criteria	<ul style="list-style-type: none"> <li>• Return to sport testing</li> </ul>

References: University of Wisconsin,  
 PT name and date: Rachel Georgeson, MSPT April 2016  
 MD name and date: Approved by MD April 2016

### MAMMOTH ORTHOPEDIC INSTITUTE

85 Sierra Park Road • Mammoth Lakes, CA 93546 • 760.924.4084  
 162 South Main Street • Bishop, CA 93514 • 760.872.7766

### SIERRA PARK PHYSICAL AND OCCUPATIONAL THERAPY

85 Sierra Park Road • Mammoth Lakes, CA 93546 • 760.934.7302  
 162 South Main Street • Bishop, CA 93514 • 760.872.2942