



### Quad Tendon/Patellar Tendon Repair Post-operative Rehabilitation Protocol

#### Phase 1: 0-2 weeks post-operatively

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Protect repair</li> <li>• Minimize pain</li> <li>• Minimize swelling</li> <li>• Plan to begin physical therapy and/or home exercise program 1-3 days after surgery</li> </ul>
<b>Brace/Crutch Use</b>	<ul style="list-style-type: none"> <li>• Brace is locked at 0 degrees for first 4 weeks</li> <li>• Full weight bearing with brace locked to 0 degrees using crutches</li> </ul>
<b>Range of Motion</b>	<ul style="list-style-type: none"> <li>• Avoid active knee range of motion</li> <li>• 0 degrees knee extension (use heel prop or prone hang for passive extension)</li> <li>• Passive knee flexion &lt;30 degrees at the discretion of therapist</li> </ul>
<b>Strengthening</b>	<ul style="list-style-type: none"> <li>• Ankle pumps</li> <li>• Gentle patellar mobilization (medial and lateral only)</li> <li>• Work on quad control (quad sets, heel slides, straight leg raises- brace locked at 0 degrees)</li> </ul>
<b>Home Instructions</b>	<ul style="list-style-type: none"> <li>• Keep surgical dressings clear and dry</li> <li>• Change surgical bandages on 2nd day after surgery (keep covered until first clinic visit)</li> <li>• Can bathe on the 2nd day after surgery (do not scrub, soak, or submerge the incisions)</li> <li>• Sutures will be removed at first post-operative visit</li> <li>• Take Aspirin (or other DVT medication) twice daily for 2 weeks after surgery</li> </ul>

#### Phase 2: 2-6 weeks post-op

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Protect repair</li> <li>• Minimize pain and swelling</li> <li>• Progress in physical therapy, gradually working on more active/active assisted range of motion</li> </ul>
<b>Brace/Crutch Use</b>	<ul style="list-style-type: none"> <li>• Brace is locked at 0 degrees for first 4 weeks</li> <li>• Full weight bearing with brace locked to 0 degrees using crutches</li> </ul>
<b>Range of Motion</b>	<ul style="list-style-type: none"> <li>• Avoid active knee extension against gravity</li> <li>• Limit knee flexion to 90°</li> <li>• Aqua therapy for ROM in water</li> </ul>
<b>Strengthening</b>	<ul style="list-style-type: none"> <li>• Closed kinetic chain strengthening</li> <li>• Work on quad control (quad sets, heel slides, straight leg raises)</li> <li>• Heel slides within ROM limitations (2-4 weeks: 0-60°, 4-6 weeks: 0-90°)</li> </ul>
<b>Home Instructions</b>	<ul style="list-style-type: none"> <li>• Avoid ambulation without brace for first 6 weeks</li> <li>• Brace locked to full extension for weeks 0-4</li> <li>• Lock brace to 90° when sitting</li> <li>• Start weaning off crutches after 6 weeks post-op</li> </ul>

### **Phase 3: 6-12 weeks post-op**

<b>Goals</b>	<ul style="list-style-type: none"><li>• Work on regaining a normal gait</li><li>• Improve active range of motion</li><li>• Incorporate more muscle strengthening</li></ul>
<b>Brace/Crutch Use</b>	<ul style="list-style-type: none"><li>• Wean off crutches and brace as tolerated</li><li>• May ambulate using one crutch on the opposite side of operative leg</li></ul>
<b>Range of Motion</b>	<ul style="list-style-type: none"><li>• Stationary bike</li><li>• Avoid deep flexion to include knee bends, lunges, and squats</li><li>• Progress to full ROM</li></ul>
<b>Strengthening</b>	<ul style="list-style-type: none"><li>• Wall slides</li><li>• Leg press with 2 legs</li><li>• Hamstring curls</li><li>• Single leg balance starting on floor</li><li>• Chair/wall squats</li><li>• At 10-12 weeks, can use all cardio equipment as tolerated (no jogging)</li><li>• Unilateral step ups and downs- progress height as tolerated with emphasis on controlled descent</li><li>• Variations of lunges to include walks and squats</li></ul>

### **Phase 4: 12-16 weeks post-op**

<b>Goals</b>	<ul style="list-style-type: none"><li>• Full weight bearing</li><li>• Full knee ROM</li><li>• Progressive stretching and strengthening of muscles</li></ul>
<b>Brace/Crutch Use</b>	<ul style="list-style-type: none"><li>• Full ambulation without use of crutches or brace- can use neoprene sleeve or ace wrap if needed</li></ul>
<b>Range of Motion</b>	<ul style="list-style-type: none"><li>• Full knee range of motion</li><li>• Focus more on strengthening</li></ul>
<b>Strengthening</b>	<ul style="list-style-type: none"><li>• Continue as above</li><li>• Initiate jogging on treadmill</li><li>• Lateral movements (stepping, shuffling, hopping, carioca, etc)</li><li>• Full strength- at least 85-95% of unaffected leg, use isokinetic test if needed</li></ul>

For any questions about operative details or rehabilitation guidelines, please contact the respective surgeon's Athletic Trainer at the contact information found at this link: <https://med.virginia.edu/orthopaedic-surgery/orthopaedic-divisions/sports-medicine/protocols/>