



## ORIF Patellar Fracture (Tension Band)

<u>Postop</u>	<u>Goals</u>	<u>Precautions</u>	<u>Exercises/Interventions</u>
<b>Phase I Weeks 0-6</b>	<p>Promote fracture healing</p> <p>Isolated quad set in full extension</p> <p>0° active knee extension</p> <p>100° active knee flexion max</p> <p>Minimal knee effusion</p> <p>Ambulation with assistive device</p>	<p><u>Post-Op Week 0-3</u> Gait training w/assistive device WBAT (post operative brace locked at 0° extension or in immobilizer) <b>All exercises with brace on</b></p> <p><u>Post-Op Week 3-6</u> Gait training w/assistive device WBAT (brace open to 90°) <b>All exercises with brace on</b></p>	<p><u>Post-Op Week 0-3</u> Ankle pumps Terminal knee extensions SLR supine as tolerated A/AROM knee FLEX while sitting 70° - 90° Compression, ice, elevation</p> <p><u>Post-Op Week 3-6</u> Quad sets Heel lift with straight leg raise Side lying hip abduction Side lying hip adduction Standing terminal knee extension A/AAROM knee FLEX while sitting to 100° max Standing hamstring curls Ankle strengthening Compression, ice, elevation</p>
<b>Phase II Weeks 6-12</b>	<p>Independent ambulation</p> <p>Independent stair navigation</p> <p>Knee FLEX &gt;120°</p> <p>Single leg balance for &gt; 15 seconds</p>	<p><u>Post-Op Week 6-9</u> WBAT to FWB without brace</p>	<p><u>Post-Op Week 6-9</u> Quad sets SLR Standing terminal knee extension w/TheraBand Wall slide (small ROM to start) Static single leg balance activities A/AAROM knee FLEX while sitting Hamstring/passive extension stretch Stationary bike Shuttle or light leg press Aquatic therapy Elliptical Sidelying hip ABD/ADD</p> <p><u>Post-Op Week 9-12</u> SLR with 0-3lbs ankle weight Step ups Stairmaster Static and dynamic single leg stance activities</p>

<b>Phase III Months 3-6</b>	<p>Increase total leg strength to allow for functional progression</p> <p>Improve balance and proprioception</p> <p>Restore local muscular and cardiovascular endurance</p>	<p>Criteria for Entering Phase III:</p> <ol style="list-style-type: none"> <li>1. Satisfactory clinical exam</li> <li>2. Normalize gait pattern</li> <li>3. Reciprocal stair negotiation</li> </ol>	<p>Leg press</p> <p>Squats</p> <p>Lunges (front, side, back)</p> <p>Step ups (front, side, back)</p> <p>Leg curls (stand, sit, prone)</p> <p>4-way hip machine</p> <p>Resisted walking (front, side, back)</p> <p>Resisted gastroc/soleus</p> <p>Balance/proprioception</p>
<b>Phase IV Months 6-9</b>	<p>Normalize strength, endurance, proprioception</p> <p>Prepare for return to sport</p> <p>Provide confidence in performance of the knee</p>	<p>Criteria for Entering Phase IV:</p> <ol style="list-style-type: none"> <li>1. Satisfactory clinical exam</li> <li>2. &lt;1" thigh girth OR &lt;25% isokinetic test for quads</li> <li>3. Equal single leg stance</li> </ol>	<p>Continue phase III activities decreasing number of exercises while increasing intensity of program (decrease reps, increase load)</p> <p>Step 1: Jog progression</p> <ul style="list-style-type: none"> <li>- Fast walk</li> <li>- High knee march</li> <li>- Carioca</li> <li>- Figure 8</li> <li>- 4-way reaction drill</li> <li>- Eccentric step-off</li> <li>- Jog</li> </ul> <p>Step 2: double leg jump progression</p> <ul style="list-style-type: none"> <li>- Shuttle</li> <li>- Jump rope (speed/duration)</li> <li>- Line jumps (direction/height/speed)</li> <li>- Box jumps (direction/height/speed)</li> <li>- Distance jumps (direction/height/speed)</li> </ul> <p>Step 3: sprint progression</p> <ul style="list-style-type: none"> <li>- Increase speed of all above drills</li> <li>- Add sport replication activity</li> </ul> <p>Step 4: single leg hop progression</p> <ul style="list-style-type: none"> <li>- Shuttle</li> <li>- Jump rope</li> <li>- Line jumps</li> <li>- Box jumps</li> <li>- Distance jumps</li> </ul>
<p><b>Return to sport/occupation criteria:</b></p> <ol style="list-style-type: none"> <li>1. Satisfactory clinical exam</li> <li>2. &lt;10% isokinetic strength deficit for quads</li> <li>3. Satisfactory completion of sport replication activity</li> <li>4. Pass both single leg functional tests <ol style="list-style-type: none"> <li>a. Single leg hop for distance AND</li> <li>b. Single leg triple cross-over hop for distance (15cm wide) <ol style="list-style-type: none"> <li>i. Best of 3 trials</li> <li>ii. &lt; 15% deficit comparing involved/uninvolved (limb symmetry index)</li> </ol> </li> </ol> </li> </ol>			