

Quadricep and Patellar Tendon Repair

Dr. Green

Time Frame	Treatment	Goals
Post-Op Day 1- Phase I (Day of surgery – 2 weeks after surgery)	<ul style="list-style-type: none"> • Instruction in signs and symptoms of infection • Instruction in cryotherapy • Instruction in HEP including ankle pumps, isometric quad sets, hamstring sets, glute sets and patellar mobilizations. • Ambulate with crutches • WBAT (Weight bear as tolerated) with knee locked in extension. Brace must be worn at all times. • Keep incision covered and dry 	<ul style="list-style-type: none"> • Protect the repair • Independent in HEP • Independent in cryotherapy • Independent in donning and doffing of knee brace.
Phase II (2 – 6 weeks after surgery)	<ul style="list-style-type: none"> • Weeks 3- 6: Gradually work towards 0 to 90 degrees without active quadriceps extension • Precautions and ROM may be altered on a patient-by-patient basis. Check with surgeon. • Exercises: heel slides, knee extension stretch, 4-way SLR, patellar mobilizations, weight shifting on surgical limb with brace on. 	<ul style="list-style-type: none"> • Normalize gait with WBAT, continuing to use brace locked in extension. • Brace must be locked in extension unless completing rehab exercises • Wean from crutches given good leg control in extension • Progression Criteria: 0-90 Knee ROM, progress 6 weeks post-op
Phase III (usually 6-12 weeks after surgery)	<ul style="list-style-type: none"> • Graduate progression to weight bearing with knee flexion. • No weight bearing in flexion past 70 degrees for 12 weeks after surgery. • Exercises: Stationary bike, prone knee flexion, open-chain hip strength, core stability, Closed chain quadriceps control from 0- 40 degrees with light squats and leg press. Progressing to shallow lunge steps , active range of motion for open chain knee flexion and extension against gravity only. 	<ul style="list-style-type: none"> • Normalize gait on level surfaces with brace opened to 30- 40 degrees without crutches • Initiate active quadriceps contractions in weight bearing. • Progression Criteria: Normal gait mechanics without crutches. Active knee ROM at least 0 -110 degrees.

<p>Phase IV (begin at 12 weeks after surgery until progression criteria is met)</p>	<ul style="list-style-type: none"> • Avoid any forceful eccentric contractions • Avoid impact activities • Avoid exercises that create movement compensations • Suggested exercises: non-impact balance and proprioception, stationary bike, gait drills, hip and core strengthening, stretching of muscle imbalances. 	<ul style="list-style-type: none"> • Normalize gait on all surfaces without brace • Single leg stance with good quad control for 10 seconds • Full Knee ROM • Good control with squat to 70 degrees of knee flexion • Progression Criteria: Dynamic neuromuscular control without pain, instability or swelling.
<p>Phase V (Approx. 4 months after surgery)</p>	<ul style="list-style-type: none"> • Post-activity soreness should resolve within 24 hours • Avoid post-activity swelling • Avoid running with compensatory patterns or a limp • Suggested exercises: <ul style="list-style-type: none"> ○ Impact control exercises beginning 2 feet to 2 feet, progressing from 1 foot to the other, then 1 foot to same foot ○ Movement control exercise beginning with low velocity, single plane activities and progressing to higher velocity, multi-plane activities ○ Sport/work specific balance and proprioceptive drills ○ Continuation of Phase IV exercises 	<ul style="list-style-type: none"> • Good control and no pain with sport and work specific movements including impact • Progression to sport/work criteria: Dynamic neuromuscular control with multiplanar activities, without pain or swelling. • Receive clearance from both orthopedic surgeon and rehabilitation specialist prior to return to sport/work.