

Quadriceps and Patellar Tendon Repair Rehabilitation Protocol

Phase	Goals	Precautions / Restrictions	Treatment
Weeks 0 – 3	<ul style="list-style-type: none"> Manage swelling and pain Protect surgical site PRICE principles ROM: 0 - 30° Reduce muscle atrophy Reduce swelling Decrease pain and inflammation Maintain full brace use for standing, walking, sleeping 	<ul style="list-style-type: none"> Toe Touch Weight Bearing (Heel to flat) with Knee in Full Extension using crutches <ul style="list-style-type: none"> Brace must be on and locked in extension when WB ROM restrictions: <ul style="list-style-type: none"> 0 - 30° with surgeon approval ACTIVE flexion and PASSIVE knee extension only Allograft use will slow progression (contact surgeon for restrictions) 	<ul style="list-style-type: none"> PRICE Cryotherapy (5 x day) / Modalities as indicated Compression with TubiGrip / TEDS ROM limited from 0 - 30°: <ul style="list-style-type: none"> Supine knee extension w/ towel under ankle Patella Mobilizations Quadriceps recruitment Gen LE isometric / proximal hip strengthening Gait training with crutches Cardio: Upper body ergometer Initial visit: FOTO, LEFS, PRO
Weeks 3 – 6	<ul style="list-style-type: none"> Protect surgical site Price principles ROM: 0 - 60° Reduce atrophy / progress strengthening Reduce swelling Progress weight bearing SLR without extensor lag Maintain full brace use for standing, walking, sleeping 	<ul style="list-style-type: none"> Toe Touch Weight Bearing (Heel to flat) with Knee in Full Extension using crutches <ul style="list-style-type: none"> Brace must be on and locked in extension when WB Progress to WBAT at Week 6 ***Surgeon may progress quicker depending on repair ROM 0 - 60° Avoid painful activities / exercises 	<ul style="list-style-type: none"> Cryotherapy (5 x day) / Modalities as indicated Gait training to WBAT ROM limited from 0 - 60°: Core stabilization exercises Global LE strengthening SLR in all planes Double limb weight shift / balance / proprioception Cardio: Upper body ergometer Week 6: FOTO, LEFS
Weeks 6 – 9	<ul style="list-style-type: none"> ROM: 0 - 90° Restore full patellar mobility Wean from crutches with brace unlocked from 0-40 degrees Initiate functional LE strength with quad activation in weight bearing 	<ul style="list-style-type: none"> ROM restrictions: 0 - 90° <ul style="list-style-type: none"> ACTIVE flexion and PASSIVE knee extension only Brace worn while weight bearing <ul style="list-style-type: none"> 0 – 40° knee flexion maximum with all weight bearing activity Avoid painful activities / exercises 	<ul style="list-style-type: none"> Aerobic training – UBE and UE circuit Increase loading capacity for lower extremity strengthening exercises with a 40° flexion maximum Continue balance/proprioceptive training Core strength and OKC strength all planes Week 9: FOTO, LEFS
Weeks 9 – 16	<ul style="list-style-type: none"> Full ROM Normalize gait Discontinue brace Functional strengthening Begin stationary bike when able 	<ul style="list-style-type: none"> Progress ROM <ul style="list-style-type: none"> ACTIVE flexion ACTIVE knee extension Avoid impact of involved LE No eccentric training of involved LE 	<ul style="list-style-type: none"> Walking drills, Initiate stretching as needed Progress as tolerated: ROM, CKC strength, Endurance, Proprioception / Balance Cardio: Stationary bike, elliptical Week 12: FOTO, LEFS
Weeks 16 +	<ul style="list-style-type: none"> Correct asymmetries between LEs Initiate increased impact and dynamic activity with surgeon approval (jumping, running etc.) <ul style="list-style-type: none"> Avoid cutting, pivoting until week 20 Unrestricted return to activity (Months 6-9) 	<ul style="list-style-type: none"> Avoid running / jumping on a painful or swollen knee Avoid cutting, pivoting, and high intensity plyometrics until week 20 Proper form and control during exercise → Avoid faulty mechanics Post activity soreness resolution within 24 hours 	<ul style="list-style-type: none"> Can begin loading beyond 90° as tolerated Initiation of power activity Sport specific movements when allowed Core strength Agility / footwork when allowed Week 16: FOTO, LEFS, PRO Athletes may perform RTS testing at week 24

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process.

Each patient's progress may vary based on specifics of their injury and procedure.

