Aaron J. Casp, MD Sports Medicine, Hip, Knee, and Shoulder Surgery 1201 11<sup>th</sup> Ave S Birmingham, AL 35205 Ph: (205) 930-8339

## Partial Patellar Tendon Repair Protocol

Phase/ Goals	Immobilization	ROM	Therapeutic Exercises
Phase 1 (0-2 weeks) Goals: • Edema and pain control • Eliminate effusion	Knee brace locked in extension while walking Full weightbearing with brace and crutches may unlock 0-90 while sitting	<ul> <li>Avoid open chain extension</li> <li>Begin PROM 0 – 90 deg immediately</li> <li>Patellar mobilization all directions</li> <li>Modalities:</li> <li>NMES if unable to perform SLR without lag</li> <li>Cryocuff/Game Ready Compression/ Ice</li> </ul>	<ul> <li>Extension: heel prop, prone hang</li> <li>Long sitting HS stretch</li> <li>Quad sets, glut sets</li> <li>SLR x4 with assist until no lag</li> <li>Ankle pumps</li> <li>Calf raises on leg press</li> <li>Gait training on flat TM</li> </ul>
Phase 2 (2-6 weeks) Goals: No effusion Increase ROM Normalize gait	<u>2-4 weeks</u> : May unlock 0-45 with PT <u>4-6 weeks</u> : full WB brace fully unlocked	<ul> <li>Begin A/ PROM as tolerated with therapy 0-45 for weeks 2- 4, then unlock after</li> <li>Modalities:</li> <li>Scar STM when incision healed</li> <li>Patellar mobs all directions</li> <li>Gentle prone quad stretch/knee flex</li> </ul>	<ul> <li>Heel slides/wall slides/seated assist flexion</li> <li>Lateral band stepping after 4 weeks</li> <li>LE stretching: HS, quads, ITB, piriformis (pain free)</li> <li>Quad sets/glut sets, clams/mini-hydrants/glut pushes</li> <li>Calf raises on leg press</li> <li>Single leg press</li> <li>Standing TKEs</li> <li>Gait training- when gait WNL, progress to reverse incline</li> <li>Lateral walks with sport cord</li> <li>Abductor strengthening</li> </ul>

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Phase 3 (6-10 weeks) Goals: • Full ROM • Normalize ADLs • Begin strength	Wean fully out of brace by week 6 Full ROM	<ul> <li>Full A/PROM</li> <li>Manual:         <ul> <li>Joint mobs PRN for full flex and ext ROM</li> <li>Patellar mobs/ Scar STM with extractor</li> <li>Modalities:                 <ul> <li>Ice/stim PRN</li> </ul> </li> </ul> </li> </ul>	<ul> <li>Begin bike, elliptical, stair master with low resistance</li> <li>Step ups/lateral step over's- progress to faster pace</li> <li>Lateral walks with sport cord</li> <li>SLS dynamic surfaces</li> <li>Hamstring curls</li> <li>Mini squats</li> <li>Planks</li> <li>Continue glute/quad/core</li> </ul>
Phase 4 (10+ weeks) Goals: • Jogging without pain/swelling • SL jump w/o difficulty		• Full A/PROM	<ul> <li>Continue everything in phase 3</li> <li>Walk/jog progression</li> <li>Advanced closed chain exercises</li> <li>Jogging patterns at 50-75% speed</li> <li>3 months: begin jumping, progress running</li> <li>advance to sprint, backward running, incorporate cutting/change of direction, plyo program</li> <li>Muscular power – squads, split jumps, sled drags</li> <li>Gym program activities</li> <li>Sport-related strengthening</li> </ul>