

ACL Reconstruction

Postop	Goals	Precautions	Exercises
<p>PHASE I</p> <p>Weeks 0-2</p> <p>PT : 1-2x/week</p> <p>HEP daily</p>	<p>Full passive extension</p> <p>Reduce swelling 90° flexion by 5d post-op</p> <p>Maintain patella glide</p> <p>Achieve good quad set at 0° and 90°</p> <p>Wean from crutches by the end of this phase</p>	<p>Brace removal prn by therapist for exercises</p> <p>Brace locked at 0° for sleeping and ambulation</p> <p>Weight-bearing as tolerated immediately post-op with crutches</p>	<ol style="list-style-type: none"> 1. 0° quad sets (consider NMES or biofeedback for protocol control). 2. Assisted flexion (dangle) with uninvolved leg crossed under ankle. 3. 90° quadriceps isometrics once 90° flexion achieved. 4. Passive hyperextension (sitting) to full extension ASAP. 5. Straight leg raises, all planes, with brace locked in full extension. 6. Calf, hamstring stretching, calf pumps. 7. Weight shift exercises with brace locked in full extension 8. Heel slides. 9. Stationary bike for promotion of range of motion.
<p>PHASE II</p> <p>Weeks 2-4</p> <p>PT: 1- 2x/week</p> <p>HEP daily</p>	<p>Full passive extension mandatory</p> <p>Restore normal gait on level surfaces out of brace</p> <p>Restore patella mobility to normal</p> <p>Achieve good quad set at 0° and 90°</p> <p>Wean from crutches by the end of this phase.</p> <p>Sleep out of brace once full extension is maintained.</p> <p>ROM 0-125</p> <p>Normalize gait pattern</p>	<p>Brace locked at 0° for ambulation until patient demonstrates good safe quad control (avoid fall).</p> <p>D/c crutches when non-antalgic gait WBAT</p>	<ol style="list-style-type: none"> 1. Patella and scar tissue mobilization by therapist and patient. 2. Straight leg raises continue in brace until strength is sufficient to prevent extension lag. Add weight as tolerated only if full extension maintained. 3. Isometric quad sets at 90° knee flexion (use a belt looped around leg of chair). 4. Theraband™ leg press from 100° to 0°. 5. Passive hyperextension (sitting or prone hangs) to full extension ASAP. 6. Calf strengthening (Heel raises standing, sitting, and Theraband™). 7. Closed kinetic chain quadriceps strengthening (mini squats, weight shifting, leg press). 8. Single leg balance, proprioception work. 9. Stationary bike – progress light resistance as tolerated.

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<p>PHASE III</p> <p>Weeks: 4-10</p> <p>PT 2x/week</p> <p>HEP daily</p>	<p>Regain full motion to flexion.</p> <p>Restore patella mobility to normal.</p> <p>Begin improving proprioception.</p> <p>Normal community ambulation.</p> <p>Increasing strength with program in therapy and / or club.</p>	<p>Avoid terminal open chain quad PRE</p> <p>No running.</p> <p>No jumping or cutting activities</p>	<ol style="list-style-type: none"> 1. Continue Range of motion / flexibility to equal opposite side 2. Continue closed kinetic chain quad strengthening and progress to single leg mini squats (pt may use weighted back pack), single/ double leg press, wall sits to 90°, stepups, lateral step-up, and weighted terminal knee extension. 3. Continue to progress hamstring, calf, and hip strengthening (side steps, resisted walking, raises, curls). 4. Stationary bike – increase time and resistance levels. Progress to interval program. 5. Elliptical, NordicTrack, Stairmaster, treadmill machines and walking for conditioning with attention paid to patella symptoms. 6. Pool programs – walking initially with progression to deep-water aqua jogging. 7. Continue to progress proprioception and balance activities (ball toss, balance boards, foam, and mini trampoline). 8. Open chain knee extension from 100° to 45° 9. Isometric quad sets at 90° knee flexion – sitting and supine (ie. Hip flexed and neutral).
<p>PHASE IV</p> <p>Weeks: 10-20</p> <p>PT 2-3x/week</p> <p>HEP daily</p>	<p>Full ROM Normal patella mobility.</p> <p>Gain sufficient strength, proprioception to initiate straight jogging.</p> <p>If swelling limits flexion – pt to take 2 Aleve PO BID.</p>	<p>Avoid patellar fracture with heavy weight lifting. (if BTB)</p> <p>No sudden starts/stops or quick change in direction.</p> <p>No jumping or cutting activities</p>	<ol style="list-style-type: none"> 1. Continue strength building program by increasing weights and decreasing repetitions per set, 3-4 times per week. 2. Progress toward full weight-bearing jog at 12 weeks. Begin on treadmill and advance to track (initially walking curves). Slowly increase the pace and distance. 3. Advanced proprioception activities. 4. Isokinetic strengthening full range of motion if available. 5. Open chain knee extension 30° to 0°
<p>PHASE V</p> <p>Weeks: 20-24</p> <p>PT: 1-2x/week</p> <p>HEP daily</p>	<p>Restore advanced proprioception</p> <p>Restore normal muscle strength and endurance</p> <p>Safely restore functional sports performance in controlled setting.</p> <p>Slow and controlled cutting activities under light load.</p>	<p>Quadriceps/hamstring strength 80% of uninvolved thigh required for phase V.</p> <p>No fast or aggressive cutting</p> <p>No hopping down from > 12" height</p>	<ol style="list-style-type: none"> 1. 4 week return to sports program/ agility program issued by therapist / physician. 2. Slow progression into plyometric training. 3. Cross overs 4. Figure 8 running. 5. Box / shuttle running 6. Accelerating / decelerating sprints 7. Progression into sport specific drills.

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PHASE VI Equal performance lower extremities on single and 3 hop test

Begin 6 months post-op. Symmetric performance of basic and sport specific agility drills.

Return to sports.

Supervised but independent program

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