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PHYSICAL THERAPY REHAB PROTOCOL

ACL Reconstruction

Rehab Protocol

Pre-Op

- Physical therapy 2 weeks prior to surgery: ensure full ROM, increase quad/hamstring strength, normalize gait
- Schedule a PT visit for 3–7 days after surgery

Week 1

- Ankle pumps every hour
- Post-op brace to maintain full extension
- Quad sets and SLR (brace on) with no extension lag
- Pillow or towel roll under heel to regain full knee extension
- Patellar mobilization exercises
- Heel slides
- AAROM off the end of the table (using non-surgical leg for assistance)
- PWB with brace locked in full knee extension 0–50% (until excellent quad control, then allow PWB with brace unlocked). Brace locked in full extension for sleeping. Brace can be unlocked for sitting
- PROM 0–110° of knee flexion; do not force past 90° of knee flexion
- Ice or Cryo-Cuff (use a pillowcase or thin towel over the bladder portion as a thin barrier between skin and bladder) for 20 minutes on and 30–40 minutes off
- If hamstring graft: no isolated hamstring exercises until 4–6 weeks

Weeks 2–3

- Supervised PT 2–3 times per week (may need to adjust based on insurance)
- Continue SLRs in brace (until patient is able to perform without any extension lag), quad isometric sets, ankle pumps, patellar mobilization, heel slides, AAROM off the end of the table, passive knee extension with towel roll under heel
- Patient should have full passive knee extension and slight hyperextension equal to non-surgical leg
- PWB with brace locked in full knee extension 0–50% (until excellent quad control, then allow PWB with brace unlocked). Brace locked in full extension for sleeping. Brace can be unlocked for sitting
- May remove brace for HEP, except for SLR (if patient has extension lag)

- Quad E-stim for muscle re-education (use until excellent quad control and no extension lag)
- Stationary bike for ROM: start with seat elevated and work toward normal seated biking position. Minimal resistance
- Leg press (two legs, single leg, eccentric single leg) 0–95 to 100° of flexion
- Closed chain lower extremity exercises (per WB restriction), i.e. mini squats
- Balance and proprioception (per WB restriction)
- Progressive resistive hamstring exercise (not to begin until 4–6 weeks if hamstring graft)
- Heel raises
- Hip strengthening exercises
- Core exercises

Weeks 4–6

- Continue above exercises and ice as necessary
- Can begin scar massage / mobilization
- Work toward full PROM (by 6 weeks)
- Can progress from 50–100% WB (to progress, needs excellent quad control / no extension lag, minimal edema and normalized gait). Goal 100% by 4–6 weeks
- Continue to progress LE closed chain exercise (working toward passing Leg Press Test). Sagittal plane and minimal frontal plane exercises (TB lateral steps). No transverse

6 Weeks – 3 Months

- Continue to progress LE closed chain exercise (working toward passing Leg Press Test). Sagittal plane and frontal plane exercises (TB lateral steps). No transverse
- Allow aquatic therapy if requested (all incisions completely scarred over; flutter kick only, no whip kicks)

Months 3–5

- Continue to progress LE closed chain exercise (working toward passing Leg Press Test and Single Hop Test)
- Progress to home jogging program when cleared by MD/PA

Months 5–6

- Continue to progress LE closed chain exercise (working toward passing Leg Press Test and Single Hop Test)
- Agilities (can begin once patient has passed Leg Press Test and Single Leg Hop Test)
- Light sagittal plane and frontal plane plyometrics (criteria to begin: quad strength > 80% of contralateral side, full AROM, swelling < 1 cm at joint line, no pain)

Months 6–9

- Continue to progress LE closed chain exercise (working toward passing Leg Press Test and Single Hop Test)
- Progress to sport-specific agilities and sport-related plyometrics (once general agility program is finished, Leg Press Test and Single Leg Hop Test are passed, and MD exam is satisfactory)

> This is strictly an outline of the major exercises and progression we would like incorporated. The two main goals are that appropriate progress is made weekly and that communication between patient, therapist and doctor occurs frequently.

These instructions are general guidelines from Dr. Tannenbaum's office. Always follow any specific instructions given to you by Dr. Tannenbaum or his team. Questions? Call Southern Indiana Orthopedics at (812) 376-9353.