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ACL Reconstruction With Meniscus Repair Rehab Protocol

Diagnosis: ACL tear, meniscus tear

Frequency: 2-3 visits/week

Duration: 4 months

ACL Graft used: Hamstrings autograft / Allograft

Pre-Op

- Physical Therapy 2 weeks prior to surgery, insure full ROM, increase quad/hamstring strength, normalize gait
- Schedule a doctor visit for 14 days after surgery
- Schedule a PT visit for 2 days after surgery

Week 1

- Ankle pumps every hour
- Post -op brace to maintain full extension.
- Quad sets & SLR (Brace on) with no lag
- NWB with crutches
- Ice or Cryocuff Unit on knee for 20-30 minutes every hour
- Pillow or towel roll under heel passive knee extension exercise
- Passive ROM exercises only if done with therapist present (Brace off):
Goal: 0 to 70 degrees only.

Week 2 (No knee flexion past 90 deg)

- Supervised PT 2 - 3 times a week (may need to adjust based on insurance)
- Continue SLR's in brace, quad isometric sets, ankle pumps
- NWB with crutches
- Passive knee extension with towel roll under heel

- Patellar mobilization exercises
- Brace locked in full extension for ambulation and sleeping, and may unlock for sitting. Continue to use crutches when out of home
- May remove brace for HEP, except SLR
- Flexion exercises seated AAROM
- Stationary bike for range of motion (short crank or high seat, no resistance)

- Hamstring and calf stretching
- Hip strengthening
- Heel raises with brace on
Goal: 0-90 degrees

Week 3 (no knee flexion past 90 deg)

- Continue with above exercises/ice treatments
- NWB with crutches
- D/C crutches if stable with brace in full extension for ambulation
- Perform scar massage aggressively
- AAROM (using good leg to assist) exercises (4-5x/ day)
- Emphasis full passive extension
- Progressive SLR program for quad strength with brace off if no extensor lag (otherwise keep brace on and locked) - start with 1 lb, progress 1 -2 lbs per week
- Theraband standing terminal knee extension
- Single leg standing
- Hamstring PREs
- Seated leg extension (90 to 40 deg) against gravity with no weight

Week 4 (no knee flexion past 90 deg)

- Continue all exercises
- NWB with crutches
- Continue ROM stretching and overpressure into extension
- SLR's - in all planes with weight

Week 5

- Continue above exercises
- Lock brace with knee in extension for ambulation, WBAT with crutches if needed, unlock brace for ROM at rest
- Self ROM 4-5x/day using other leg to provide ROM, emphasis on maintaining 0 deg passive extension
- Advance ROM as tolerated - no limits
- Mini-squats and weight shifts
- Isotonic leg press (0 - 70 degrees)
- 4 inch step ups
- Regular stationary bike if flexion > 115
- Lateral step out with therabands
- Retro treadmill progressive inclines
- Heel raises

Week 6

- WBAT with brace unlocked
- D/C crutches
- Continue above exercises
- Half squats (0-40 degrees)
- Add ball squats - Goal: 0 to 115 degrees, walking with no limp
- Initiate retro treadmill with 3% incline (for quad control)
- Brisk walking
- Progress balance and board throws
- 8 inch step ups
- 4 inch step downs
- Swimming allowed, flutter kick only

Week 7-9

- Advance ROM
- D/C brace if quad control adequate
- Retro treadmill progressive inclines
- Stairmaster machine
- Increase resistance on stationary bike
- Sport cord (bungee) walking
- Start slide board
- 6-8 inch step downs

Week 10

- Begin resistance for open chain knee extension
- Bike outdoors, level surfaces only
- Plyometric leg press
- Jump down's (double stance landing)
- Progress to light running program and light sport specific drills if:
 - Quad strength > 75% contralateral side
 - Active ROM 0 to > 125 degrees
 - Functional hop test >70% contralateral side
 - Swelling < 1cm at joint line
 - No pain
 - Demonstrates good control on step down

Week 11-22

- If full ROM, quad strength > 80% contralateral side, functional hop test >85% contralateral side, satisfactory clinical exam:

Progress to home program for running. Progress to hops, jumps, cuts and sports specific drills. Begin to wean from supervised therapy.

4-5 Months

- Criteria to return to sports
 - Full Active ROM
 - Quadriceps >90% contralateral side
 - Satisfactory clinical exam
 - Functional hop test > 90%
contralateral side
 - Completion of ACL
running program

One Year

- Doctor visit