OSS Orthopedic Specialists of Seattle

PROLIANCE SURGEONS®

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ACL Reconstruction Rehabilitation Framework

Pre-operative "Prehabilitation" Phase

Focus: Reduce inflammation, restore ROM/quads/gait, educate in anticipation of surgery

1	Hinged rehab brace fitting
2	Crutch ambulation training
3	Pre-op exercise training: • Quad sets • Leg lifts • Active flexion/passive extension • Patella mobilization • Quad/Hamstring isometrics at 90° flexion
4	For acute ACLs: • Quad re-education • Restore/improve ROM • Reduce inflammation/edema • Hinged brace, locked at 0° flexion for ambulation until quad control regained

Post-operative Rehabilitation/ Day of surgery

Focus: Pain control

1	Discharge home
2	Oral narcotics, NSAIDS, IM Toradol, Intra-articular MSO4/Marcaine
3	Brace locked in extension
4	Compressive dressing
5	Cryotherapy
6	Elevation above heart level, pillow under foot, not knee (if tolerated)
7	Crutches - PWB as tolerated, progress to FWBAT MD/PT Visit #1 - POD #5-7: Exam, xrays, dressing change, suture removal, approve start of PT

Weeks 0-4

Focus: ROM, regain quad-dominant leg, diminish inflammation

1	Weight bearing: FWBAT in 1-2 weeks
2	Brace: locked in extension until quad control regained, then unlock 0-50° (prevent hyperflexion if fall occurs) (Note: Discard crutches when able to ambulate without limp)
3	Anti-inflammation: tubigrip/ACE, cryocuff, NSAIDS
4	ROM: Progress 0-120° unless otherwise specified (e.g. meniscal repair, etc.) ROM Goals: Week 1: 0-65° | Week 3: 0-100° | Week 4-6: 0-140°
5	Hip, hamstring, calf PREs
6	Quad re-education (stim/biofeedback only if necessary)
7	Quad isometrics, SLR in brace, ok to do quad isometrics in CKC fashion at 50-60° after 90° flexion attained
8	Leg press 40°- 90° arc, start with eccentric and light weight
9	Short-crank bike ergometry
10	Emphasize patellar mobilization
11	Cardiovascular exercise as tolerated
12	Modalities PRN
13	TEACH/REVIEW/EMPHASIZE HOME PROGRAM MD Visit - POD#5-7, then PRN based on wound care, ROM, etc. per PT PT Visit - POD#7, POD#10then at 2 and 4 weeks based on progress/need - increase frequency

ACL Reconstruction Rehabilitation Framework, *cont'd*

Weeks 4-6
Focus: Maximize ROM, prepare for strengthening, allow final early graft ingrowth

1	Full WB, wean out of brace to neoprene sleeve for proprioception
2	Gait training in pool if available
3	Aggressive ROM as tolerated (Goal 0-140°)
4	Leg press, 30-90° arc
5	Calf raises
6	Bicycle ergometer
7	Active flexion, active-assist from 90-50°, passive to 0° MD Visit - 6 weeks: exam, xrays poss. PT Visit - at 4 and 6 week mark based on progress

Weeks 6-12
Focus: Begin knee reconditioning

1	Restore normal gait pattern
2	Begin progressive squat/step program
3	Begin proprioceptive program, balancing program
4	CKC exercises: leg press, mini-squats, wall slides, etc.
5	Endurance activities
6	Nordic track if available MD Visit - 12 weeks: exam PT Visits - Week 9

Weeks 12-20
Focus: Begin functional exercise training

1	Continue lower extremity PREs
2	Begin functional exercise program and plyometrics
3	Progress endurance activity
4	Begin running program at 12 weeks (initial straight-line, flat surface) if patient can do a controlled, eccentric-loading step down a stair with non-op leg leading
5	Continue flexibility program in lower extremities MD Visit - None if doing well PT Visit - Weeks 12 and 16

Weeks 20-28
Focus: Begin return to sport

1	Full arc PREs to restore strength, emphasizing quads
2	Agility exercises
3	Advanced functional exercises
4	Progress running program
5	Functional test assessment at 24 weeks (6 months)
6	Return to limited sport based on results after 24 weeks MD Visit - 24 weeks PT Visit - 20 and 24 weeks

Weeks 28-36
Focus: Return to sport

1	Restore strength, function, endurance, and agility of extremity
2	Sports-specific training
3	Functional test assessment/isokinetic test asssesment at 36 weeks
4	Return to full sport after 36 weeks as indicated MD Visit - 36 weeks PT visit - 32 and 36 weeks (prior to MD recheck so test data available to clear RTP)