

ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION REHABILITATION PROTOCOL

(TO BE GIVEN TO PHYSICAL THERAPIST)

	WEIGHT BEARING	BRACE	ROM	THERAPEUTIC EXERCISE
WEEK 1:	<ul style="list-style-type: none"> Weight bearing to tolerance, unless otherwise specified 	<ul style="list-style-type: none"> Locked at 0° extension until adequate quad control 	<ul style="list-style-type: none"> As tolerated 	<ul style="list-style-type: none"> Flexion: wall slides, heel slides to patient tolerance Extension: Passive knee extension using towel roll, prone hangs Strengthening: Quad setting with knee support, hamstring digs with knee support, plantarflexion/dorsiflexion, eversion/inversion strengthening
WEEK 2:	<ul style="list-style-type: none"> Weight bearing with assistive devices as needed 	<ul style="list-style-type: none"> Unlock brace when quad control is adequate for knee support 	<ul style="list-style-type: none"> As tolerated, goal for knee flexion is 90° 	<ul style="list-style-type: none"> Flexion: wall slides, heel slides, sitting flexion Extension: Passive knee ext using towel roll, prone hangs Bike Open kinetic chain: straight leg raise, Hip abd/adduction, hip extension, hamstring set or prone hamstring curl Closed Kinetic Chain: Heel raises, leg press with minimal resistance, weight shifting onto single leg Trunk stabilization Manual Interventions: patellar mobs, tibiofemoral mobs into extension, soft tissue as indicated
WEEKS 3-4:	<ul style="list-style-type: none"> Achieve full weight bearing without assistive device with functional gait 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Increase flexion ROM approx. by 10° per week Achieve and maintain full passive and active extension 	<ul style="list-style-type: none"> Open Kinetic Chain: Straight leg raises into flexion with emphasis on endurance of quadriceps and full knee extension Open Kinetic Chain: Hip strengthening and hamstring curls Open Kinetic Chain: Short arc quadriceps extension Closed Kinetic Chain: leg press (increasing resistance, progress to single leg), partial squat to 60°, step ups, heel raises progressing to single leg Manual interventions, modalities and trunk stabilization exercises

	WEIGHT BEARING	BRACE	ROM	THERAPEUTIC EXERCISE
WEEKS 4-6:	<ul style="list-style-type: none"> Gradually discontinue crutch use 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Full active and passive extension Flexion within approx. 10° of uninjured leg 	<ul style="list-style-type: none"> Closed Kinetic Chain: step downs, single leg balance, terminal active knee extension to 0° against resistance, full squat to 90°, single leg squat, elliptical, treadmill walking if gait pattern is functional Functional Goals: reciprocal stair ascending, walking with normal gait pattern
WEEKS 6-8:	<ul style="list-style-type: none"> Full weight bearing 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Full active and passive extension and flexion ROM 	<ul style="list-style-type: none"> Progress intensity of strengthening program incorporating single leg activities Cardio activities: elliptical, treadmill, stair climber, walking outdoors, or uneven surfaces Closed Kinetic Chain: step downs, lateral step/down, sustained squat side stepping
WEEKS 8-12:	<ul style="list-style-type: none"> Full weight bearing 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Full and pain free range of motion 	<ul style="list-style-type: none"> Jumping activities on gravity eliminated shuttle (progress to single leg) Jogging on trampoline Dynamic single/double leg functional exercises as anticipated for sport activity
WEEKS 12+:	<ul style="list-style-type: none"> Full weight bearing 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Full and pain free range of motion 	<ul style="list-style-type: none"> Progress to running when: 90% of quadriceps strength as measured, single leg squat depth, hop Testing, single leg balance duration Return to running: treadmill walk/run intervals, treadmill running, track running (run straight, walk turns), track running full, road running Agility and plyometric exercises Lateral and cutting maneuvers