



POST-OPERATIVE GUIDELINES FOLLOWING PCL RECONSTRUCTION

Crutches / Ambulation	6 to 8 weeks partial weight bearing with crutches. Weight bearing may start from day 1 post surgery.
Brace	6 to 8 weeks.
Range of Movement	No active flexion allowed for 6 weeks. Knee may be flexed passively by your Physiotherapist.
Stocking	10 days.
Driving	Consult with Dr. Barrow or your Physiotherapist but not before 8 weeks.
Open chain hamstring exercises – avoid for 4 months.	
Stationary bike	8 to 10 weeks.
Road bike	4 months.
Elliptical machine	12 weeks.
Swimming (crawl)	4 months.
Jogging in a straight line	4 months.
Running on an uneven surface	6 months.
Skiing / jumping	6 months.
Contact sport	9 months.
The above time guides are approximations only – consult with Dr. Barrow or your Physiotherapist before starting any of the above activities.	
NOTE: The range of motion allowed after posterior cruciate ligament reconstructive surgery is dependent upon the stability obtained at the time of surgery. Range of motion exercises are initiated at Dr. Barrow’s discretion in the initial six weeks post-surgery.	
NOTE: Start with your physiotherapy out-patient treatment approximately 4 to 5 days post-surgery.	
<u>Post-operative exercises:</u>	
Week 0 to 3	To be done 4 time per day: <ul style="list-style-type: none"> • Isometric quads progressing to a straight leg raise in brace (3 x 8). • Knee pushes into bed, hold for 5 seconds (3 x 8). • Bridging using roller / ball (3 x 8). • Passive flexion in prone (lying on stomach). • Hip extension exercises: <ul style="list-style-type: none"> ○ While standing against a counter, desk or table lift operative limb (with the knee braced) behind you. Avoid

	<p>bending forward at the waist (3 x 8).</p> <ul style="list-style-type: none"> • Hip abduction exercises: <ul style="list-style-type: none"> ○ While standing, in brace, and holding onto a counter or table, lift the operative limb out to the side. Hold 5 seconds, then relax slowly (3 x 8).
Practice walking with a heel / toe gait.	
Ice (15 minutes on – 10 minutes off repeated throughout the day for the first 2 weeks.	
Week 4 to 6	<ul style="list-style-type: none"> • Practice walking with a heel / toe gait. • Ice (15 minutes on – 10 minutes off repeated throughout the day for the first 2 weeks). • Straight Leg Raises – done in brace – no sag allowed*. • Quadriceps sets*. • Hip extension*. • Hip abduction*: <ul style="list-style-type: none"> - May also be performed by lying on non-operative side and lifting operative limb toward the ceiling. Be careful the hip and leg do not roll forward with this exercise. <p>*Add weight to exercises as tolerated.</p> <p><u>Aims of physiotherapy in the first 6 weeks:</u></p> <ul style="list-style-type: none"> • Prevent stiffness through passive flexion of the operated knee (0 to 90°). • Decrease swelling / pain. • Maintain quadriceps activation. • Achieve full extension.
Special consideration must be taken to avoid posterior sag of the tibia, i.e. place pillow under proximal tibia.	
Week 6 to 12	<ul style="list-style-type: none"> • Goals: <ul style="list-style-type: none"> ○ Normal gait pattern, initiate weight bearing. ○ Improve quadriceps muscle tone, girth. ○ Improvement of range of motion from full extension to at least 125° of flexion. • Programme: <ul style="list-style-type: none"> ○ Range of motion: Active, active assisted, passive ROM exercises four times a day. ○ Ambulation: Progress to one crutch on the non-operative side once normal gait pattern is achieved with full weight bearing on crutches. The one crutch must come forward and make ground contact in synchrony with the operative limb. Once a normal gait pattern is established, the crutch may be discarded. There should be no limping as this will promote posterior tibialis pain, semi-membranosis bursitis and sacroiliac joint dysfunction. Consult with Dr. Barrow regarding discontinuing of your brace. ○ Continue straight leg raises, quadriceps sets, hip

	<p>extension, and hip abduction exercises daily. Weight may be added proximal to the knee joint (on the thigh) as strength permits.</p> <ul style="list-style-type: none"> ○ Stationary Bicycle: Once 115° of flexion is achieved the use of a stationary bike is allowed. The seat height should be set so the lower leg should have the knee flexed approximately 15°. Start with no resistance. Progress from 5 minutes to 20 minutes as strength permits. The foot should be placed slightly forward on the pedal (without toe clips) to minimise hamstring activity. ○ Calf Raises: Perform with knee straight with heels over the edge of the step or curb. Perform 3 sets daily of 10 repetitions done slow and fast (each). ○ Swimming: Allowed but no whip kick. Ambulation in chest high water also permitted (laps around pool or lane). ○ Stairmaster: Permitted at 8 weeks. Progress as tolerated with low resistance initially. Work up to 10 to 12 minutes daily. ○ Wall slides: (from 0 to 45°) progress to mini squats as tolerated. ○ Leg presses: Light weight, to maximum of 90° of knee flexion (start off at 25% of body weight). (3 x 10).
<p>Week 13 to 16</p>	<ul style="list-style-type: none"> • Straight leg raises: May move weight to tibial tubercle region and progress distally on the tibia an inch per week. Maximum of 4kg's. • Continue hip abductors, quadriceps sets, hip extension exercises. Progress weight. • Stationary bicycle: Increase resistance as tolerated. • Range of motion programme: Flexion of 125° or full flexion should be achieved by this point. • Swimming: Continue same programme. No whip kicks allowed. • Calf raises: Continue daily. • Stairmaster: Work up to 12 to 16 minutes per session. Increase resistance as tolerated. • Squats: Three quarter squats. Initially perform with no weights and progress to ½ body weight as strength / endurance allows (4 x 12) daily. • May start hamstring curls in standing – no weight >2kg's until 17 weeks.
<p>Week 17 to 24</p>	<ul style="list-style-type: none"> • Goals: <ul style="list-style-type: none"> ○ Achieve full range of motion by this point. It is not unusual for the last 10° to 15° of knee flexion to take up to 5 months to achieve. ○ Want quadriceps to be 70% of body weight / unaffected

	<p>leg. Thigh circumference measured at 15cm above the superior pole of the patella should be within 2cm of the contralateral (normal) thigh.</p> <ul style="list-style-type: none"> ○ Progress functionally in activities and avoid patella femoral irritation. <ul style="list-style-type: none"> • Programme: <ul style="list-style-type: none"> ○ Follow 13 – 16 week protocol. ○ May progress to slow jog (1.6km) and repeat. Build to 3km's per day. Add 1km per week as strength permits. Walk 1km at end of session at brisk pace to cool down.
<p>Week 24 and onwards</p>	<ul style="list-style-type: none"> • Goals: <ul style="list-style-type: none"> ○ Continue with functional training programme on a daily basis (walk / run, biking, stair-master, squats, exercises). ○ Practice sport of choice on own in non-competitive manner. ○ Add ACL agility drill programme. ○ Running in a straight line if patient is ready. • Return to sport: <ul style="list-style-type: none"> ○ No pivot sports for 6 months. ○ No contact sports for 9 months unless cleared by Dr. Barrow. <p>Returning to sports means the presence of the necessary joint range of motion, muscle strength and endurance, and proprioception to safely return to work or athletic participation.</p>

