



PETER HARDCASTLE
ORTHOPAEDIC SURGEON

ACL Surgery

Pre, During & Post Operation



ACL Surgery

Surgery:

Reconstruction of an ACL involves replacing the torn ligament usually with part of the hamstring, from behind the knee or sometimes part of the patellar tendon or quadriceps tendon. We will drill tunnels through the bone. Your new ACL is brought through these tunnels, and then secured. As healing occurs, the bone tunnels fill in to secure the tendon.

Immediately After Surgery:

You will return from theatre with a padded crepe bandage from your calf to thigh. You may have had local anaesthetic put into your knee. This often causes numbness and a feeling that you are unable to move your leg. This is normal and usually improves within a few hours. You will be offered painkillers and we strongly advise you to take these regularly to minimise discomfort and swelling. The padded bandage will change to a light wound covering and tubigrip.

We will give you walking sticks or crutches to help you walk and to get about, until you have better control of your leg muscle. We will show you how to use them properly to walk and when on stairs. It is really important that you take good care of your wound and pain control. It is also important to keep down any swelling.

Pain:

Wound pain is normal, this will gradually lessen over the next few days. Use the painkillers supplied regularly as prescribed. If pain or swelling increase contact us

Swelling & Heat:

Swelling is normal immediately after surgery. Use a cold pack if your knee is hot and swollen. You can make a cold pack by wrapping a bag of frozen peas in a damp tea towel. Remove the tubigrip and apply the cold pack to your knee for not more than 15 minutes at a time. You may reapply it once your knee has returned to its normal temperature. Wear the tubigrip during the day but remove it at night to allow your circulation to flow properly.

Wound Care:

Change the clear wound dressing. You may see dark blood stains – don't worry this is normal. If your wound becomes hot, red and weeps fluid, contact us

Rehabilitation:

Rehabilitation starts immediately after your surgery. The rehabilitation is just as important as the surgery itself. You need commitment and effort to make the most of your rehabilitation. To make sure your progress is quick and safe your physiotherapist will follow a specially designed programme based on up to date information:

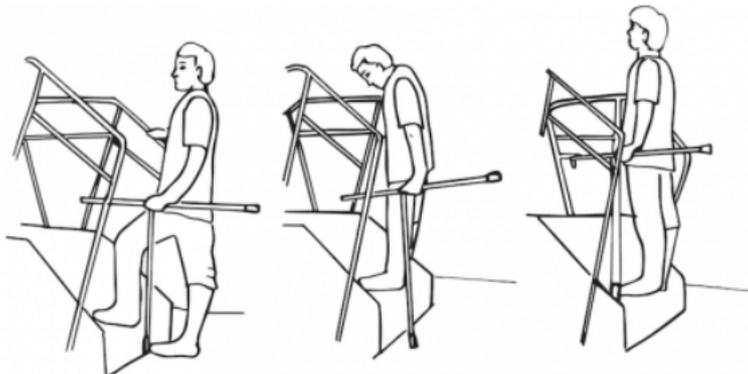
- To minimise swelling.
- To regain full range of movement.
- To restore normal walking.
- To strengthen muscles.
- To allow safe return to sporting activities.

Going Up The Stairs:

1. Place crutches or stick down onto step.
2. Place operated leg onto same step.
3. Finally place un-operated leg onto same step.

Going Down The Stairs:

1. Place un-operated leg up onto step.
2. Place operated leg onto same step.
3. Finally place sticks or crutch onto step.



Remember:

“Up with the good, and down with the bad”.

Always use your crutches or sticks to support the operated leg.

Always use the handrail, if there is one, as well as one stick or crutch.



Returning To Activity:

Every individual is different and you should follow the advice of your physiotherapist:

- Walking without crutches: as advised by your physiotherapist.
- Work at a desk: approximately 2 – 4 weeks.
- Other jobs: depends on activity.
- Driving: approximately 4 – 6 weeks.
- Return to sport: as advised by your physiotherapist.

Exercises:

Your exercise programme should start from day one and has been carefully designed for safe and rapid progress:

- Rest your knee between sessions of exercise. When resting keep your leg up on a stool or settee.
- Walk only short distances for the first few days.
- Continue using your crutches as shown by the physiotherapist until we tell you otherwise.
- It is important that you can straighten your knee fully and you are walking without a limp before you stop using crutches.
- Finally, it is important to continue with the exercise as shown by your physiotherapist.
- The early phase of your rehabilitation is below and your physiotherapy sessions should start a few days following surgery. Initially your physiotherapist will assist you to move your knee.
- Continue with exercises 1 – 5 as shown until your first physiotherapy appointment.

1. Static Quadriceps

- Position: Lying down or sitting
- Action: Tighten the thigh muscle, pull your foot towards you and push your knee down into the bed or chair. Hold for 5 seconds then relax
- Repeat: 10 x every 1-2 hours

2. Knee Bending

- Position: Lying down
- Action: Slowly slide your heel towards your bottom. Stop at the point of pain and hold for 5 seconds then straighten again.
- Repeat: 10 x every 1-2 hours

3. Straight Leg Raise

- You must keep your knee straight and locked out.
- Position: Lying down
- Action: Tighten the thigh muscle and keep your knee straight, slowly raise your leg off the bed. Do not lift the leg higher than 10-15cm (4-6 inches) from bed. Hold for 5 seconds.

4. Terminal Extension

- Position: Lying down with your heel on a rolled towel
- Action: Tighten the thigh muscle, pull your foot towards you and press your knee down. Hold for 5 seconds then relax.
- Repeat: 10 times every 1-2 hours or rest in this position for 10 minutes every 1-2 hours.



5. Prone Stretch

- Position: Lying on your front with feet over the bed edge.
- Action: Place a pillow or towel under your thigh for comfort. Allow the weight of your legs to stretch the back of the knee. Hold position for 10 minutes. Rest in position for 10 minutes.
- Repeat: Every 1-2 hours.

6. Calf Stretch

- Position: Lying or sitting
- Action: Use a towel or belt around your foot, to pull your foot gently towards you to stretch your calf. Perform 10 times, holding stretch for 20 – 30 seconds.
- Repeat: Every 1 – 2 hours.

*Your physiotherapist will teach you how to do exercise 7 – 13 safely 3-6 weeks after surgery:

7. Knee Flexion

- Position: Lie face down
- Action: Tuck your good leg, bend your operated leg to heel, bend your knee to 90 degrees.

8. Hip Extension

- If you can bend knee freely to 90 degrees, extend your hip by lifting your thigh off the bed.
- Return to starting to position.
- Repeat: 10 times every 4 hours.

9. Hip Abduction

- Position: Lie on your side with your back against a wall
- Action: Keeping the heel in contact with the wall, slowly raise your leg.
- Return to starting to position.
- Repeat: 10 times every 4 hours.

10. Weight Transfer & Balance

- Position: Standing by a chair for balance if needed
- Action: move your weight from side to side over your feet
- Repeat: 10 times every 4 hours.

11. Single Leg Balance

- Position: Standing on one leg
- Action: Practice standing on your operated leg. Try to increase the time to match your good leg.
- Repeat: 10 times every 4 hours

12. Calf Stretch

- Position: Stand by a chair or wall for support
- Action: Step back with one leg and stretch the calf by pushing the front knee forward. Make sure your feet are pointing forwards and your heels stay in contact with the floor. Hold for a few seconds.



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13. Mini Squat

- Position: Stand by a chair for balance if needed.
- Action: Bend your knees and hips as if going to sit on a chair. Do not bend the knees more than 50 degrees (halfway down). Return to starting position.
- Repeat: 10 times every 4 hours.

14. Heel Raises

- Position: Stand by a chair for balance if needed.
- Action: Slowly raise your heel up from floor, move up onto your toe.
- Repeat: 10 times every 4 hours.

15. Cardiovascular Exercise

- Using a static bike and cycle with low resistance. Cycle for 10-15 minutes – before (as a warm up) and following your exercises.

*You will attend physiotherapy for at least three months. Your rehabilitation usually takes at least 6 months depending on goals or sports.