



ACL reconstruction

Post-operative rehabilitation program

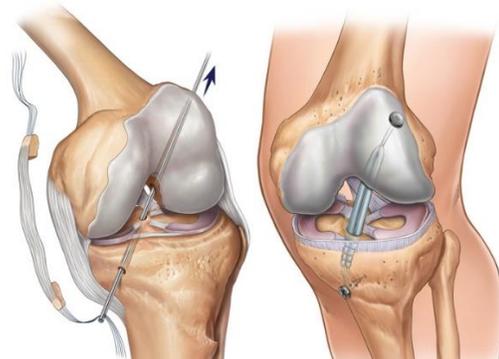
ABOUT THE OPERATION

An Anterior Cruciate Ligament (ACL) reconstruction is performed to restore knee joint stability.

A graft, from your hamstring tendon, is used to replace the damaged ligament. The graft is obtained through incisions at the front of your knee. The remainder of the surgery is done arthroscopically, with the aid of a telescope-like instrument, and without actually opening/cutting the knee joint. This results in less pain and scarring within the knee post-operatively and ultimately a quicker recovery. As the hamstring tendon is used for the graft the hamstring usually feels sore for up to 6 weeks post-op. If a synthetic (lars) graft is used this allows for a more accelerated rehabilitation program.

The graft is fed through a tunnel drilled into the tibia (shin bone), across the knee joint and then into the femur (thigh bone).

The graft is fixed at each end with screws and is therefore initially very strong, allowing early movement and weight bearing on the leg.



Because the ACL graft has no initial blood supply, time is needed for the graft to establish its own blood supply. The graft loses strength during the first 6-8 weeks, and is at its **weakest 6 weeks post-op**. It is vulnerable at this time as the knee feels strong, but the graft is only beginning to establish its new blood supply. **The graft does not have good blood supply until at least 10 weeks post-op**. At 12 months post-op, the graft is 92% as strong as the original ACL, and this is as much strength as it develops.

Please arrange to see your physiotherapist by: _____

Call Flex Physiotherapy on 93661769 for further information.



Post-operative Rehabilitation

Exercises

- After your knee operation it is very important to perform the exercises on the following pages to regain your mobility over the first 4-6 weeks.
- Only perform exercises taught to you by your physiotherapist or surgeon.
- Exercises should be performed 3-5 times a day. It may be helpful to take pain medication 30-40 minutes prior to exercise (as prescribed by your doctor).
- Schedule an appointment to see your physiotherapist 2 weeks after your operation.
- Ensure your exercises are not too painful or cause more swelling. If there are problems contact your physiotherapist via phone immediately.

Swelling:

- You may have considerable swelling around your knee after surgery.
- If this swelling persists it may impede healing and knee movement.
- This can be treated by applying ice for 20 minutes following exercises.
- Ice (crushed, cubes, frozen peas, gel pack etc.) should be wrapped in a towel and placed directly on the knee.
- Your physiotherapist will fit some compression stocking to your knee.

Crutches:

- You will be asked to bring your own crutches prior to admission by your surgeon.
- You are immediately allowed to place weight on the leg after your surgery – unless indicated otherwise by your surgeon or physiotherapist.
- Make sure you stay active, attempting to walk on the leg as much as tolerated after the operation, ensuring the knee does not swell afterwards.
- If you don't have crutches, the physiotherapist can provide you crutches for a fee.

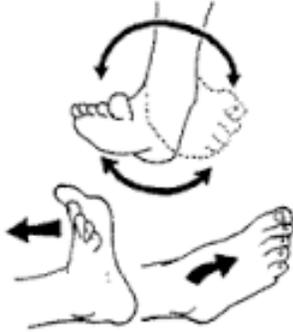
Splint:

- The splint is mostly for comfort, and it is safe to stop using it when instructed by your physio or surgeon.
 - One of our physiotherapists will show you how to put on and take off your splint after the operation.
-



Start these exercises the day after your operation

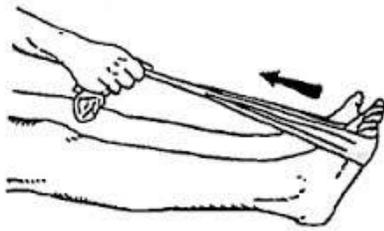
Ankle Exercises



Move your foot up and down and round in circles.

Repeat 10 times each hour in every direction.

Calf stretch



Wrap a towel around the ball of your foot and hold an end in each hand.

Gently pull your foot towards your body until you feel a gentle pulling sensation in the back of your lower leg and hold it there.

Hold for 30 seconds. Repeat 3 times in a row.
Perform on twice per day.

Hamstring Stretch

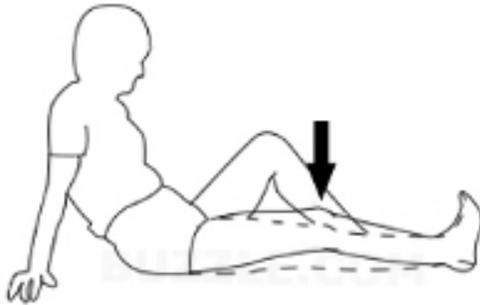


Sit with your leg out straight in front, lean forward slowly to touch your toes until you feel a pull in the back of your thigh or leg.

Hold for 30 seconds. Repeat 3 times in a row.
Perform on both legs twice per day.



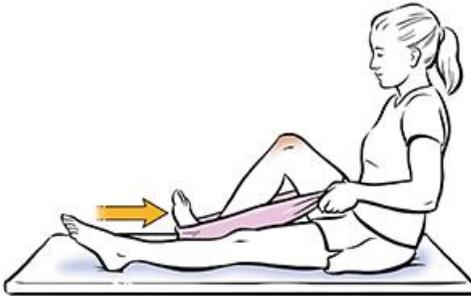
Quads Sets/isometric Extension



With your leg straight squeeze the muscles on the top of your thigh, pushing your knee down into the bed.

Hold this contraction for 5 seconds.
Repeat 10 times in a row.
Perform again 2-3 times over.
Perform twice per day.

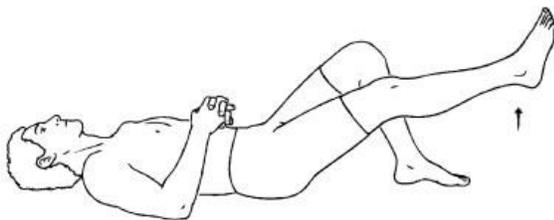
Passive Knee Flexion



Wrap a towel under your foot and hold both ends.
Pull the towel towards you so that it bends your knee.

Hold at a comfortable point for 5 seconds.
Repeat 10 times in a row. Perform 2-3 times over.
Perform twice per day.

Bent leg raise



Lie on your back.

Keeping your knee as straight as possible, raise it off the bed 40-50 cm

Repeat 10 times in a row, Perform 2 times over. 3 times per day.

Supine Hangs



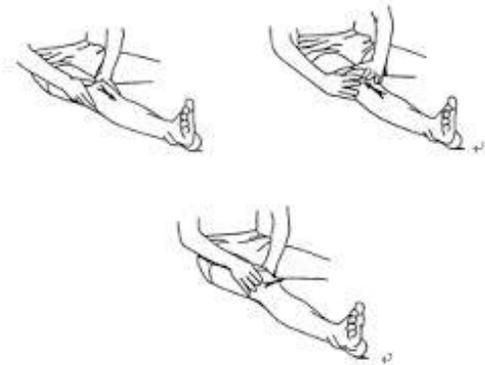
With a rolled towel under your ankle let your leg relax so your knee falls straight.

Hold for 1-2 minutes then have a break.

Repeat over 5 minutes, 2-3 times per day



Patella Mobilisations



Sitting with your leg relaxed and straight move your knee cap up and down and side to side.

10 repetitions, 2-3 times per day

Sitting ball roll



Sit in a chair with the ball under your heel to start.

Roll the ball under the chair as much as you can, so the ball rolls towards your toes as your heel moves under the chair.

Repeat 15 repetitions. Perform 2-3 times in a row.

Perform 2-3 times per day.