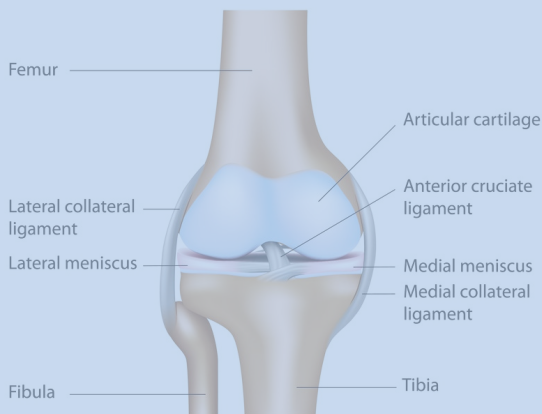


Anterior Cruciate Ligament Reconstruction



Patient Information

Introduction

This booklet is designed to provide information and advice about your Anterior Cruciate Ligament (ACL) Reconstruction. The information will aid your recovery and rehabilitation immediately following your surgery at the James Paget University Hospital and once you are discharged home.

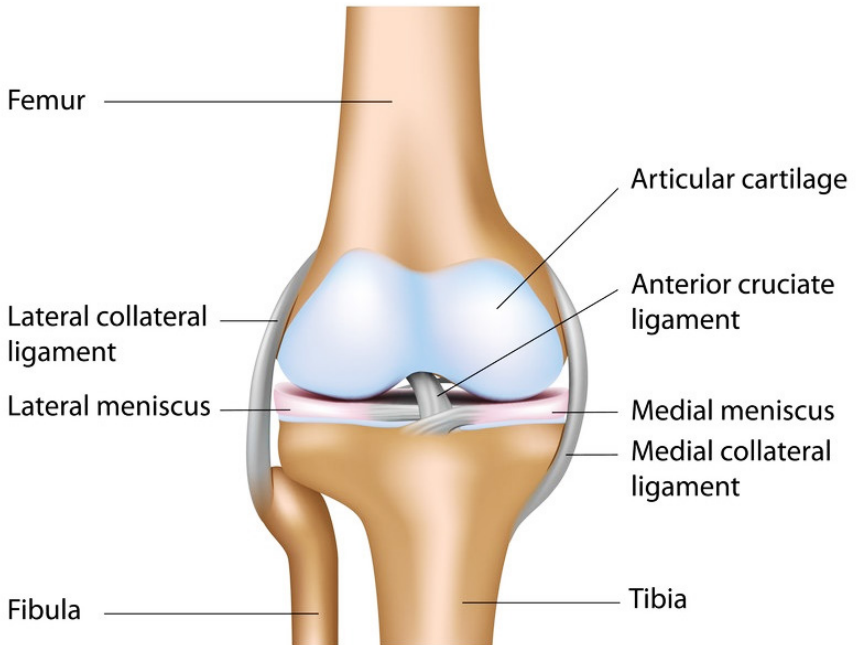
The aim of your surgery and post-operative advice is to reduce your pain, reduce stiffness and improve the movements in your knee, which will in turn improve your walking.

You will be seen by a physiotherapist on the ward before or after your operation and in the community as an outpatient for your rehabilitation.

A structured rehabilitation programme is vital for the reconstructed ACL to function properly long term. This booklet contains exercises that will help strengthen the muscles around the knee so that you regain full range of movement and function.

Anatomy and function

The ACL originates from the back of the femur (thigh bone) and passes downwards and forwards to insert on the top of the tibia (shin bone). The ACL is a broad, thick band and is approximately the size of your little finger.



The ACL is crucial for controlling rotation and forward movement of the tibia. The ACL also helps to provide side-to-side knee stability and normal knee movements (kinematics).

Mechanisms of injury

Tears of the ACL occur most commonly when the knee is subjected to twisting when the knee is slightly bent – most commonly when playing football. You may also injure other structures within your knee such as the cartilage or other ligaments.

What happens during the operation?

The reconstruction is done by taking two of the hamstrings tendons from behind the knee. These are doubled to make a bundle of 4 tendons which are passed across the knee and fixed firmly to the femur and the tibia.

Sometimes, the central or part of the patellar tendon at the front of the knee is used as the graft instead of hamstring graft.

During the operation, any associated injuries to the knee will be dealt with.

Your hospital stay

ACL reconstruction is usually a day case procedure. You may require an overnight stay depending on your recovery after the operation and the time of day it was done. You will need to see a physiotherapist before discharge. You will start to mobilise the day of the surgery.

Post-operative advice

Precautions

The following are general precautions and guidance following your surgery. If there are any other specific instructions your consultant will relay these to you.

- Within the first four to six months avoid twisting or kneeling on your knee.
- The graft is at its weakest between six to eight weeks following the operation. Be careful with activities and avoid walking on slippery floors.

Anti-embolism stockings

On the day of your operation you may be given a pair of stockings, which you would need to wear for six weeks (night and day). The aim of these stockings is to reduce the risk of blood clots. The only time these should be removed is for your legs and feet to be washed. If needed, you will be given two pairs, so you can wear one and wash one. You will need someone to help you put on and take off the stockings. The Red Cross are no longer available to help with this.

Pain relief

As with any surgery, you should expect some degree of pain. Painkillers will be prescribed and it is advised that you take them regularly so that you can perform your exercises and to be able to walk.

Ice and swelling

You will experience swelling of your knee for up to six weeks post operatively. Ice should be used to help control the pain and reduce swelling.

Sit down and place your heel on a foot stool. Make sure you place a protective layer between your skin and the ice, e.g. a damp tea towel. A large bag of frozen peas is an excellent ice pack. Remove the ice after a maximum of 15 minutes. You can

repeat this up to four times a day.

Sleeping

You can sleep on your back or side. If on your back, do not rest your knee with a pillow / towel under it. It is very important to regain full extension (fully straight) of the knee after the operation. You may find it comfortable, when on your side, to place a pillow / or towel between your knees.

Wound care

You will have five small wounds which will be closed with dissolvable sutures and glue. Keep the wounds dry until they are healed, which is normally within eight to 10 days. You can wash or shower with your waterproof dressing straight after your operation but do not put your leg under water, e.g. do not take a bath or swim. Do not rub over the wounds and pat dry. After 10 days you may shower without the dressing.

If you are using a walking aid and/or **Partial Weight Bearing** it is recommended that you do not shower and strip wash as you are at risk of falling and/or putting too much pressure through your knee.

The dressing will normally be removed at your GP practice between ten and 14 days post-surgery. If the dressing becomes loose or soggy, contact your GP for replacements.

Wound infection

If the wound edge becomes red, oozy and/or painful please contact the ward that you were admitted to for your surgery. You will be asked to come into the hospital for a physical review to assess if you need antibiotics and which antibiotics you might need. Please do not attend your local GP Practice for a review of your wound if you believe it to be infected.

Avoid using spray deodorant, talcum powder, perfumes or creams near or on the wounds until they are well healed to reduce the risk of infection.

Walking and weight bearing

Depending on the severity of your injury e.g. more than one part of your knee required attention, you may have to be **Partial Weight Bearing** for the next two weeks. This means that you can only put up to 50% of your body weight through your operated leg at any point. In order to walk, you will need crutches to help off load your body weight when you are loading your operated leg. The ward physiotherapist will go through the correct technique with you.

If you are **Full Weight Bearing** you can put as much weight through your operated leg as you feel comfortable. You may still need a crutch or two to help with pain management and to maintain a good walking pattern.

If required, the ward physiotherapist will go through with you how to complete stairs and / or steps prior to discharge.

Brace

If additional surgery was required, other than your ACL reconstruction, you may require a brace after the operation. The duration that you will be **Partial Weight Bearing** will be from six to eight weeks. The physiotherapist will show you how to fit the brace and confirm how long you will need to wear the brace for.

YOUR WEIGHT-BEARING STATUS IS

PARTIAL WEIGHT BEARING

AND THIS IS FOR

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Physiotherapy exercises

These exercises should begin straightaway following your procedure and movement should be as far as your pain allows. Aim to do five to 10 repetitions, three to four times daily.

The exercises are important to build up your strength and reduce stiffness, which will help to improve your walking.

Prior to completing your exercises, ensure that you have taken adequate pain relief as this will allow you to complete your exercises effectively.

The following exercises should not make your pain worse, however if they are too uncomfortable, please contact your consultant or community physiotherapist.

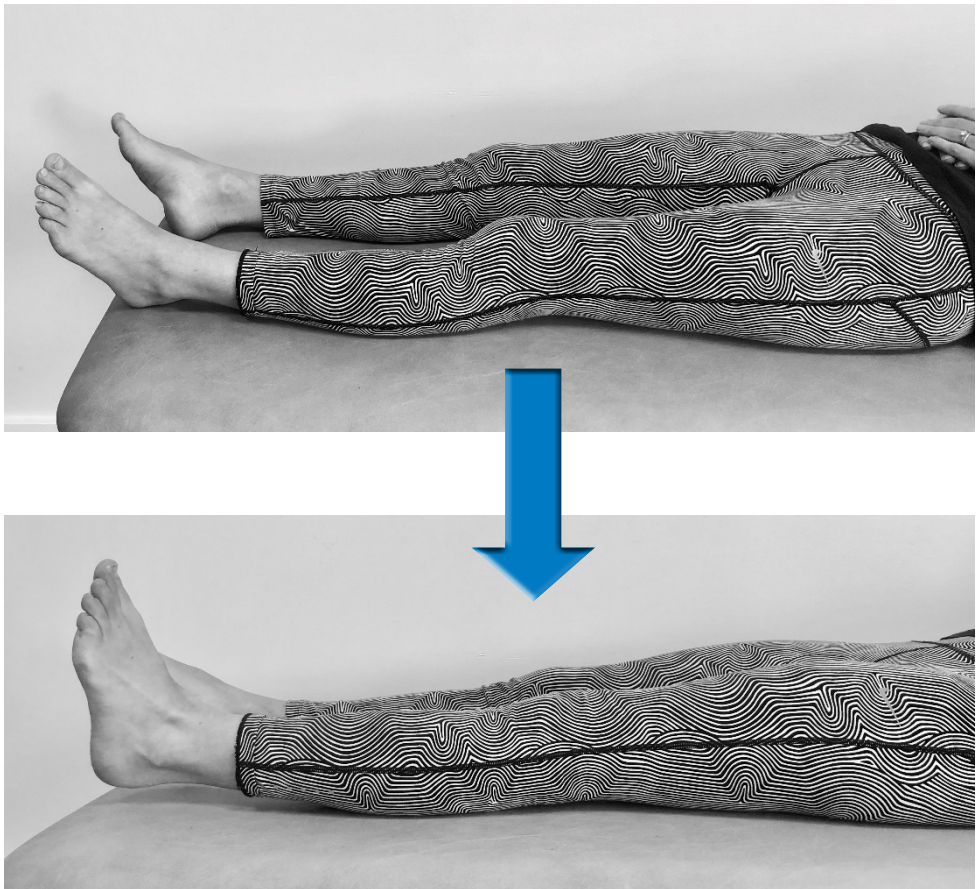
By the second week following your surgery, you should be able to bend your knee from 0° to 90°. It is extremely important to also work on straightening your knee fully.

It is important to have a balance between rest and exercising your knee. Rest your leg on a stool when sitting in a chair.

Exercise 1 – Static Quadriceps Strengthening

Sitting up with your leg straight or lying on a bed, pull your toes up towards you and push your knees down into the bed. Hold for up to five seconds then relax. You should feel your thigh muscles tightening.

This exercise is important to strengthen the muscles which straighten your knee, which is important for walking.



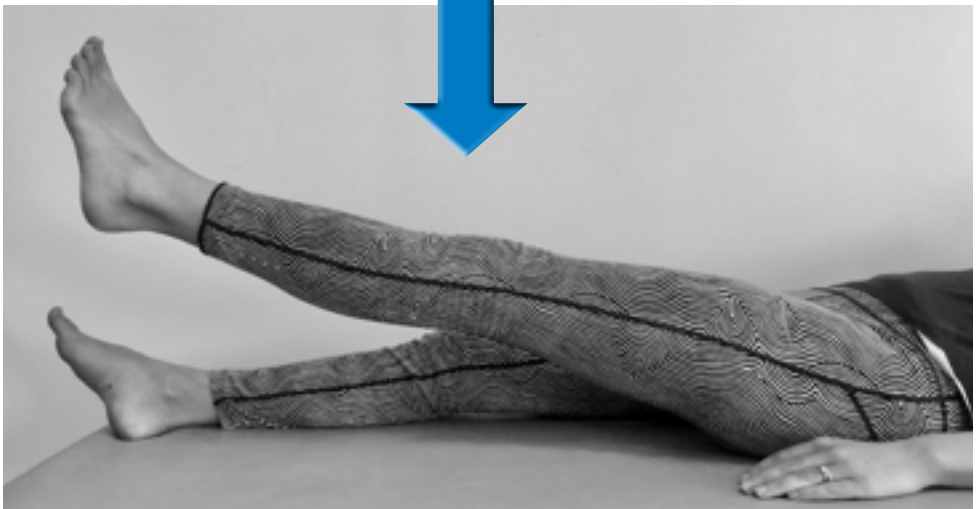
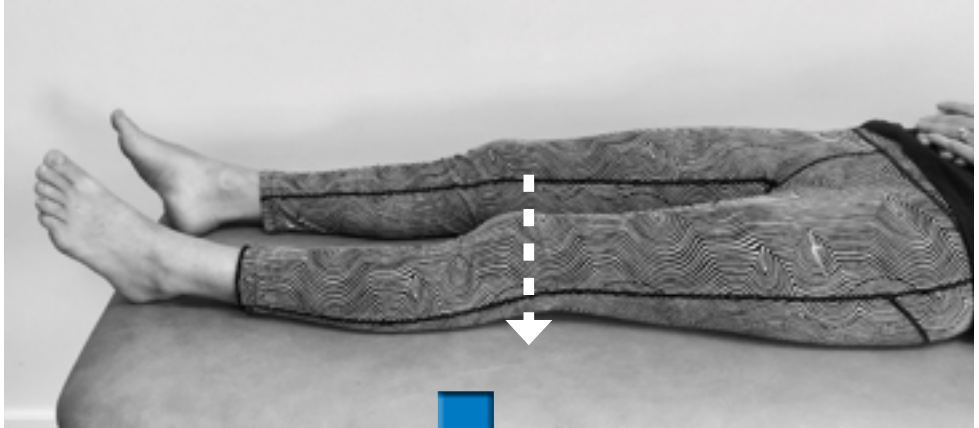
Exercise 2 – Inner Range Quadriceps Strengthening

Put a rolled up towel underneath your knee so it is slightly bent. Lift the heel up to straighten the leg. Hold for up to five seconds and then lower the heel back to the bed.



Exercise 3 – Straight Leg Raise

As with Exercise 1, tighten your thigh to straighten your knee, and then lift up your leg approximately 3 inches off the bed. Hold for up to five seconds and then lower your leg slowly to the bed.



Exercise 4 – Seated Knee Flexion

Sit on the edge of the bed or in a chair. Practise sliding your foot back towards you; once it is as far as your pain will allow you to go, tap your toes on the floor five times, and then slide your foot back further. This is important to improve your knee bend, which helps with walking and stairs.



Exercise 5 – Full Resting Knee Extension

In sitting, rest your heel on a footstool the same height as your chair. Hold for up to 10 minutes. If this is too uncomfortable, then complete this with your leg supported but with a towel under your heel to encourage a straight knee.



Exercise 6 – Passive Knee Bending

Sit on a high stool or the edge of a bed or desk and let your knee bend under gravity. Do not force the knee to bend. Hold for as long as you can tolerate up to five minutes.



Daily Exercise Completion

It is really important once you are home to continue with your exercises.

Those that complete regular exercises will have the best recovery. It will also give you an advantage when you attend your community physiotherapy appointment to get the best out of your time with them.

You could use the table overleaf to keep record of when you are doing them.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week 1							
Week 2							
Week 3							
Week 4							
Week 5							
Week 6							

Steps and Stairs

If you have stairs at home, a therapist on the ward will practise these with you. If you only have one banister on your stairs, and you are using crutches or sticks, you will be given an extra crutch/stick to take home. This extra (third) crutch/stick means you can leave one downstairs, one upstairs, and then the one you're using to complete the stairs. If you do not have a banister, the ward therapist will demonstrate how to complete the stairs.

Please note if you are **Partial Weight Bearing**, you must use the banister and a crutch even if you have two banisters to ensure you are partially weight-bearing through your operated leg.

If required you can practise any steps you have to access your property. The method is the same, but you may not have a rail to assist, so you may need to use two crutches/sticks.

The rule is:-

Non-operated leg goes up first,

Operated leg goes down first

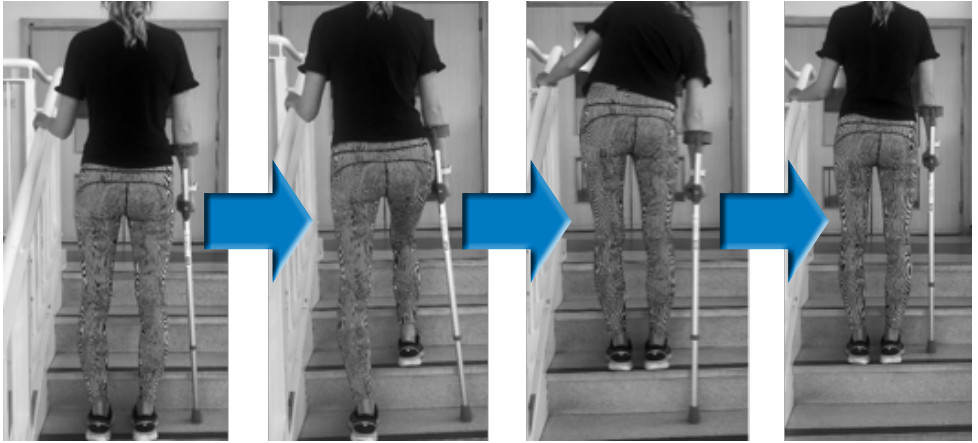
Or

Good foot to Heaven,

Bad foot to Hell

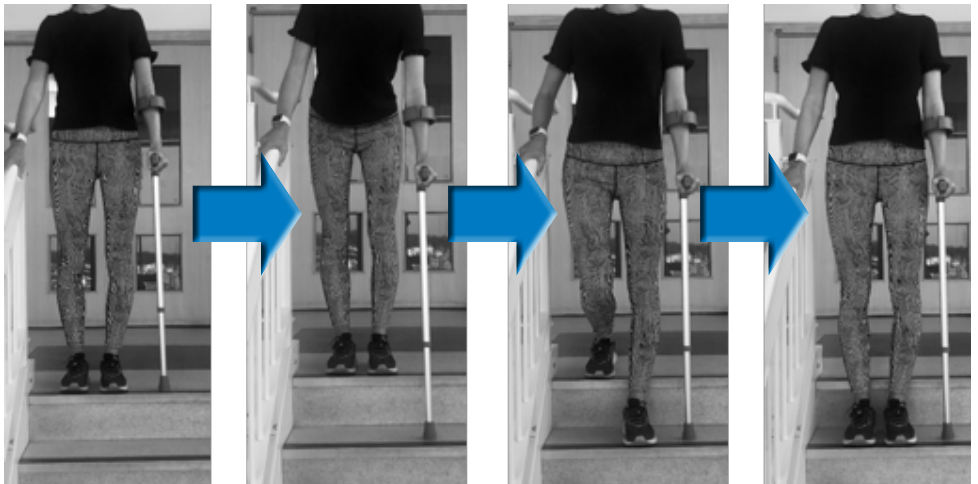
Going Up the Stairs

Hold onto the banister, with your walking aid in the opposite hand. Lead with your non-operated leg, then the operated leg, then the walking aid.



Going Down the Stairs

Hold onto the banister with your walking aid in the opposite hand. Lead with your walking aid, then operated leg, then your non-operated leg.



Your recovery

Movement and function

You should aim to increase your range of movement immediately after your operation as pain allows by continuing the above exercises. For the first two weeks following surgery, you must only bend your knee up to 90 degrees. The community physiotherapist will guide you how much you can bend your knee after this point. Once full movement has been achieved you may begin to carry out light tasks. It can take up to a year to fully recover.

Leisure activities

Progression to other activities will be guided by comfort and advice from your community physiotherapist. You will be referred to a physiotherapist once discharged from the hospital.

Return to work

Generally you should be able to return to work after four to six weeks. If unsure, please discuss further with your consultant or community physiotherapist. If you require a Fit Note, please ask the ward staff after your operation.

Driving

It is best to avoid driving after your procedure for the first few weeks. You must feel comfortable and be able to safely operate the vehicle before returning to driving. Talk with your GP or consultant to discuss this further. It is advisable to contact your insurance company to inform them of your procedure.

Return to sports

Discuss with your consultant and/or community physiotherapist initially. General progression will be guided by your pain and it is as follows:

Timescale	Sport activities you can return to
Four weeks to four months	Cycle Cross-trainer Swimming (front crawl kick only) Light weight training
Four months	Running on a treadmill Squats Golf
Five to six months	Running outside Changing directions Single hops Jumping and landing
Nine months	Tennis Squash
One year	Football Rugby

Flying

Discuss with your consultant and with the airline's medical department if you wish to fly within six weeks of your operation due to the risk of a clot. You should also discuss with your GP if there are any other measures to be taken as you may be on new medication due to your operation.

What happens when I am discharged?

You are expected to complete your exercise regime on discharge.

An appointment will be sent to you in the post for you to see your consultant.

If you need any follow up for your wound care this will be organised for you by the nurses on the ward before you are discharged.

Community physiotherapy

On discharge, your ward physiotherapist will refer you to East Coast Community Healthcare (ECCH) for community physiotherapy.

ECCH will be in contact to arrange your appointment. If you have not heard from them by the end of your first week following your discharge, please contact them directly on 01493 809977. The location of your appointment will be where it is most convenient for yourself. Please refer to the table on the following page for possible locations.

In some circumstances you may not have been seen by a ward physiotherapist prior to your discharge home. In this instance please follow the guidance given to you by the nurse on the Day Care Unit. The Integrated Therapy Team at the James Paget University Hospital will aim to contact you the next working day via telephone to ensure you are managing and discuss any immediate questions you may have.

GP Area	Outpatient Clinic
Beccles	Beccles Hospital, St Mary's Road, Beccles NR34 9NQ
Great Yarmouth	Northgate Hospital, Herbert Matthes Block, Northgate Street, Great Yarmouth NR30 1BU
Gorleston	Shrublands Health Centre, Magdalen Way, Gorleston NR31 7BP
Lowestoft	Kirkley Mill Health Centre, Cliff Road, Lowestoft NR33 0DR
Halesworth	Patrick Stead Hospital, Patrick Stead Outpatients Department, Bungay Road Halesworth IP19 8HP
Martham	Martham Medical Centre, Hemsby Road, Martham NR29 4QG
Reydon	Sole Bay Health Centre, Teal Close, Reydon IP18 6GY

Useful Contact Numbers

Hospital Switchboard	01493 452452
Day Care Unit, Primary Number	01493 452022
Day Care Unit, Secondary Number	01493 453006
Elective Unit, Ward 22	01493 452331
British Red Cross	01493 452080
Orthopaedic Therapy Office	01493 453849
ECCH, Community Physiotherapy	01493 809977

<http://physio.ecch.org>

For more information see links below:

www.NHSchoices/ACLreconstruction

www.leopinczewshi.com/rehabprotocols

www.yarmouthkneeandhipsurgeon.co.uk

If you encounter any problems after discharge related to your wound, or medications, please contact the Day Care Unit, Orthopaedic Clinic or your consultants secretary for advice as soon as possible.

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. **Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card.** Providing your feedback is vital in helping to transform NHS services and to support patient choice.

TRUST VALUES: We CARE for...
our patients... each other... ourselves

BEHAVIOURS:

Courtesy and respect

Attentively kind and helpful

Responsive communication

Effective and professional

**#Proud
of the
Paget**



The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

**For a large print version
of this leaflet, contact
PALS 01493 453240**

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© September 2016
Revised September 2020
James Paget University Hospitals NHS
Foundation Trust
Review Date: September 2023
PH 36 version 2