



Northumbria Healthcare
NHS Foundation Trust

Physiotherapy Following Anterior Cruciate Ligament Reconstruction

Issued by the Physiotherapy Department

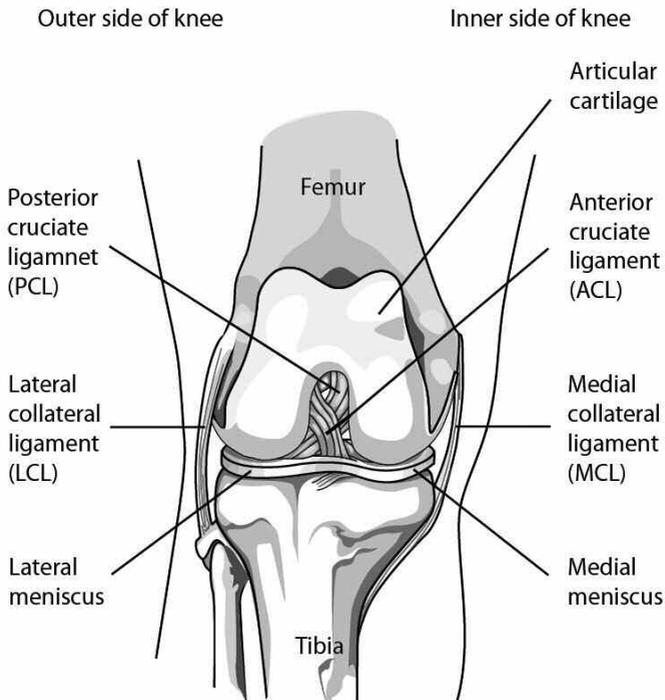
What is the purpose of this leaflet?

The purpose of this leaflet is to provide information to patients regarding physiotherapy following Anterior Cruciate Ligament Reconstruction.

What is the Anterior Cruciate Ligament (ACL)?

The Anterior Cruciate Ligament (ACL) is a band of tough, fibrous tissue that joins the lower end of the thigh bone (femur) to the upper end of the shin bone (tibia).

It helps to stabilise the knee joint. If the ACL is injured then the stability of the knee is affected which may lead to the knee 'giving way'.



What is the treatment following an ACL injury?

Most patients will undergo physiotherapy following an ACL injury to help strengthen the muscles around the knee and prevent the knee from giving way. With rehabilitation alone it may be possible to return to normal activities and even certain sports but only under the instruction of your physiotherapist and consultant.

Sometimes surgery, an ACL reconstruction, is required to repair a ruptured ACL to prevent the knee giving way and enable return to work and/or sport. Whether or not surgery is indicated will depend on:

- How unstable your knee is.
- The demands you put on your knee due to work and/or sport.
- Your willingness to participate in an intensive rehabilitation programme.

How is the ACL reconstructed?

Most of the time the ACL is replaced using a graft from your own hamstrings (the thigh muscles at the back of your leg).

Consequently it is common to have hamstring discomfort in the first 6 weeks. This is minimised by following the advice and exercises given by your physiotherapist.

The graft is very vulnerable in the first 3 months following the operation whilst it gains its own blood supply and changes into a ligament. It is very important that you follow the advice and exercises given by your physiotherapist and consultant to minimise the risk of rupturing the graft in this time.

When will I see a physiotherapist after my operation?

You will have a follow up physiotherapy appointment at your local hospital or the Hartford Unit (a rehabilitation unit) at Wansbeck General Hospital, within 1 week of your operation. The physiotherapist will give you advice on how to manage the swelling around the knee and exercises aimed at improving the movement at your knee. They will also check that you are walking correctly with your elbow crutches.

What do I do before my follow up physiotherapy appointment?

It is very important to restrict your activity for the first week after your operation. Avoid unnecessary walking, going to the toilet and back is sufficient. Continue to use your elbow crutches until you have been instructed otherwise by your outpatient physiotherapist.

Expect to use crutches for a minimum of 2 weeks. It is also very important to manage the swelling around the knee. Use ice on the knee for 20 minutes every hour unless instructed otherwise by your physiotherapist.

To avoid unnecessary pain in the hamstrings you should take care when taking your shoes and socks off. Do not dig your heel into the floor or use the other foot to assist.

You should also avoid open kinetic chain quadriceps exercises until instructed otherwise by your outpatient physiotherapist.

What are open kinetic chain quadriceps exercises?

Open kinetic chain quadriceps exercises are strengthening exercises for the muscles at the front of the thigh where the foot is not in contact with a surface, i.e. straightening your knee whilst sitting in a chair. These exercises may damage the new ligament in your knee if performed too early and with too much weight. You will be informed when to start open kinetic chain quadriceps exercises, if appropriate, by your physiotherapist. You will also be given alternative exercises to help strengthen your quadriceps.

What are the benefits of attending physiotherapy for rehabilitation?

In order for your surgery to be successful you will be expected to participate in intensive rehabilitation for 6-9 months. This is essential in order to achieve the required strength, skill, coordination and balance to enable safe return to day to day activities, work and sport.

What will my rehabilitation involve?

You will initially be seen by your physiotherapist on a one to one basis until your swelling is under control and you are able to straighten your knee fully. At this point you may be progressed into a class or a gym depending on your local hospital to continue with your rehabilitation. Alternatively you may be referred to the Hartford Unit, at Wansbeck General Hospital, for intensive rehabilitation in the form of group exercise sessions.

Rehabilitation is divided into different phases. Your physiotherapist will guide you on appropriate exercises and when you are able to progress through the different phases.

Although general time guidelines are given you will only be progressed through the different phases once you meet specific treatment goals. Expectation to progress through the different phases will also depend on the general condition of your knee and the activities you are returning to. Therefore rehabilitation may differ slightly from person to person.

After you are discharged from your physiotherapist you will be expected to continue with your rehabilitation to enable safe return to your normal activities.

What are the risks if I don't participate in my rehabilitation?

In the early stages you may have difficulty managing the swelling and regaining the movement at the knee. This can put undue stress on the knee and cause pain or secondary problems. There is also a risk that you could rupture the graft by performing movements, exercises or activities that puts too much stress on the graft. In the long term you may find you are unable to return to sport or certain work duties due to inadequate strength, skill, co-ordination and balance.

When can I drive?

You are recommended not to drive for 6 weeks following your operation unless instructed otherwise by your consultant.

When can I return to work?

Return to work will depend on the nature of the work. If you have a job which involves only sitting you may be able to go back after 2-4 weeks but are only recommended to do so if you will still be able to manage the swelling with elevation of the leg and regular use of ice. If you have a job which involves heavy loads and lifting you will be expected to be off work a minimum of 3 months.

When can I return to sport?

Return to sport is dependent on several different factors including;

- Your dedication to your rehabilitation,
- The nature of the sport,
- Your consultant,
- The opinion of your physiotherapist following assessment and functional testing.

As a guideline and **only** if instructed to do so you may return to the following activities:

- Swimming at 6-8 weeks **but no** breaststroke until 3-4 months.
- Cycling at 6-8 weeks **but** short distances only and no hill work until 3-4 months.
- Running at 3-4 months but short distances, on a treadmill only, and no road running until 6 months.
- Golf at 6 months.
- Badminton/Squash at 9 months.
- Horse riding at 9 months.

- Contact sports (Football/Rugby/Netball/Martial Arts) at 9-12 months.
- Skiing at 12 months.

Regardless of which activity or sport you participate in your return must be gradual and begin in a non competitive environment.

Contacts

Hartford Unit (Wansbeck General Hospital)

(01670) 564016

Blyth Community Hospital

(01670) 396431

Morpeth Cottage Hospital

(01670) 564185

Alnwick Infirmary

(01665) 626750

Berwick Infirmary

(01289) 356642

Hexham General Hospital

(01434) 655031

North Tyneside General Hospital

(0191) 2932723

Alternative Formats

If you would like a copy of this information in large print, another language, audio tape or other format please call the Contact Centre on **03 44 811 8118**

Other sources of information

NHS 111

NHS Choices

www.nhs.uk/pages/homepage.aspx

NICE (National Institute for Health and Clinical Excellence)

www.nice.org.uk

Patient Advice and Liaison Service (PALS)

Freephone: **0800 032 0202**

Text: 01670 511098

Email: northoftynepals@nhct.nhs.uk

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General Enquiries **03 44 811 8111**

www.northumbria.nhs.uk

PIN 218/V5

Review date: November 2021

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