

# Anterior Cruciate Ligament Reconstruction

Phase 1 Immediately Post-operative (IPO) Rehabilitation (1-3 weeks)

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Physiotherapy Department/LB/AJ Date issued: August 2015 For review: August 2016



# **ACL REHABILITATION**

# Returning to work and sport

This is a guideline as to how soon you can return to particular activities. Your return will be guided by your surgeon and Physiotherapist.

### Work

# To be agreed with Surgeon

WORK	RETURN
Light work- such as office job	4 - 6 weeks
Medium- physical job	2 months
Heavy- manual job (roofs and Ladders)	3-4 months +
Suggest phased return for any manual job.	

Driving 4-6 weeks

DVLA guidelines state the patient must be safe and competent to return to driving. Are they able to do an emergency stop?

# **Physical activity**

# To be agreed with surgeon or physiotherapist

SPORT	RETURN
ACL class or supervised exercises	6 weeks
Swimming without flippers or aids	2 months
(No breast stroke)	
Light individual sports/non-competitive	
Without rotation	3 to 4 months
Start slow running	3 months
Twisting/pivoting activities	6 months
Contact/high performance including impact	
and rotation (football, rugby, skiing)	9-12 months

These times are guidelines. The exact progression may vary depending on the individual. Rehabilitation will be monitored by your physiotherapist and surgeon. You are advised not to return to full activity too early. Over stressing the graft too early may increase the risk of graft failure.

# Each phase of exercises will work on-

Range of Movement/Stretching Strengthening Proprioception/Balance/coordination General mobility and Cardiovascular

#### Phases of Rehabilitation

Phase 1 (1-3 weeks)
Phase 2 (3-6 weeks)
Phase 3 (6-12 weeks)
Phase 4 (12-24 weeks)
Phase 5 (6 months onwards)
Return to sport



# Phase 1 Immediately Post-operative (IPO) Rehabilitation (1-3 weeks)

# Goals to be achieved before moving to next phase of rehab

Ensure adequate pain control

Minimal swelling (Jakobsen et al 2010)

Comfortable walking with crutches FWB

Aim to achieve full extension as soon as possible (Adams et al 2012)

Flexion as comfortable, should limit to 90 degrees for the first 2 weeks. (Norkin & White 1995)

#### **Guidelines for IPO**

Patient to take pain killers and anti-inflammatory medications as prescribed Rest the knee with leg elevated as much as possible when not performing physiotherapy exercises

Use your crutches for the first 2 weeks

Ice knee if swelling not settling

# Post op precautions so not to stress graft

No open chain quads activities (Quads extensions), i.e. straightening the knee with the foot out of contact with a surface.

No running, twisting, pivoting, jumping or open chain resistance work

Remember this programme is just a guideline. You may progress more rapidly or slowly through the programme as guided by your surgeon, therapist and your pain.



# Range of Motion and Stretching Programme

- Gravity assisted knee flexion
- Straightening/Extension
- Bending/Flexing in sitting
- Straightening/extension in lying
- Quads in standing

# **Gravity assisted knee flexion**

Sitting on edge of bed let gravity pull the knee into a flexed/bent position

Repeat 3-4 times a day

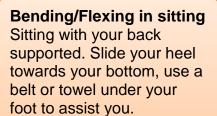




# Straightening/Extension

Sit with your knee unsupported and foot on a raise or on a stool. Allow the weight of your leg to straighten your knee.

Hold for 10 minutes, 2 times a day



Hold for ten seconds, repeat 10 times 3-4 times a day







# Straightening/extension in lying

Lie face down on a bed with your feet over the edge. Let the weight of your leg straighten your knee

Hold 10 minutes, 2 times a day



# Rest in *full extension*, even if flexion is more comfortable

# Static quads

Aim to achieve full quads active extension Sitting with leg supported, tighten your thigh muscle until your leg is straight and your knee cap moves towards your hip.

Hold 10 seconds 15 reps, 3-4 times a day



# Quads in standing

Stand with feet hip width apart. Tighten up your thigh muscle and press the knee out straight.

15 reps, 3-4 times a day



# **General Mobility**

Walking with crutches
Fully weight bear as
pain allows.
Place your crutches
forward, step forward
with your operated leg,
brace your knee straight
and step through with
the other leg. Limit your
walking to necessary
activities.

## **Stairs with Crutches**

Lean on the crutches and take a step with your healthy leg. Then take a step up with your operated leg and bring the crutches up onto the same step.

To go down put your crutches one step below. Then take a step down with your operated leg. Lean on the crutches and take a step down with your healthy leg onto the same step as your operated leg.

ALWAYS GO ONE STEP AT A TIME.







The reference list below was used to develop this protocol. If you are interested in learning more these resources may be a good place to begin.

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