Anterior Cruciate Ligament Reconstruction

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

<table>
<thead>
<tr>
<th>WORK</th>
<th>RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light work- such as office job</td>
<td>4 - 6 weeks</td>
</tr>
<tr>
<td>Medium- physical job</td>
<td>2 months</td>
</tr>
<tr>
<td>Heavy- manual job (roofs and Ladders)</td>
<td>3-4 months +</td>
</tr>
</tbody>
</table>

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

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

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/coordinatio
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.
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

Bending/Flexing in sitting
Sitting with your back supported. Slide your heel towards your bottom, use a belt or towel under your foot to assist you.
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.

References & Bibliography


