

Plymouth Hospitals



NHS Trust

# Anterior Cruciate Ligament Reconstruction

**Phase 5 Rehabilitation (6 months onwards)**

[www.plymouthhospitals.nhs.uk/ourservices/clinicaldepartments/physiotherapy/Pages/Home.aspx](http://www.plymouthhospitals.nhs.uk/ourservices/clinicaldepartments/physiotherapy/Pages/Home.aspx)

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## Phase 5 Rehabilitation (6 months onwards)

If the aim of their surgery was to restore directional stability during activities of daily living, there is little point in taking rehab a lot further. If however all is well at this stage and the aim is to return to high level activity then sports specific training should begin at six months and continue for three months aiming to return to sport between nine months and one year post operatively.

### **Criteria to progress on to phase 5;**

Normal function during normal daily activities

Be able to sit comfortably back on heels

No problems with low risk activities (i.e. running, low impact aerobics)

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

Single leg hop 95% compared with non-operative leg (Reid A et al 2007)

95% muscle power and endurance compared with non-operative leg

No pain or swelling (Jakobsen et al 2010)

Return to sport

### **Guidelines**

Return to sports specific training as agreed

### **Precautions**

Avoid returning to full sport before ready

**Box jumps** (forward, back, sideways, increase speed and progress to one leg)

Stand in front of a box, platform or step. Jump onto the box and immediately back down to same position. Repeat immediately getting progressively faster keeping landing time as short as able.

10-15 reps 2-3 sets



**Variations:**

Stand sideways next to the box or platform.

Jump sideways up onto the box then jump off the other side, then jump back up onto the box. Jump back down to the starting position and repeat as fast as you can maintain good control and alignment.

Jump completely over the box, back and forth as quickly as possible.

Progressions

Build up to 30 reps and 2 sets

Increase speed.

Use single leg



**Bounding**

Stand in front of a short box or platform.

Place one foot on the edge of the box.

Jump up high and land with the opposite foot on the edge of the box and other foot on the floor. Immediately repeat.

10-15 reps 2-3 sets

**Variations:**

Increase the platform height

Repeat without a step (skipping on the spot).

### Depth jumps

(Increase height as control allows and progress to one leg)

10-15 reps 2-3 sets

Progressing to 2 sets of 30

Stand on top of a high box, close to the front edge facing a second box.

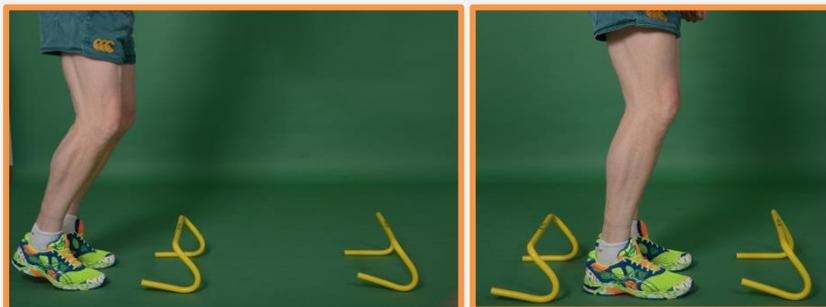
Jump from the platform, landing on both feet between the platform and the box.

Jump off the ground as fast as possible onto the box.

**Progression:**

Increase height of platform

Use single leg



### Hurdles

(Increase height, length and progress to one leg)

10-15 reps 2-3 sets

Stand facing hurdles (30-90cm height). Squat down and jump over hurdle with feet together using a double arm swing. Upon landing immediately jump over the next hurdle keeping the landings short.

**Progression:**

Increase hurdle height

Increase space between hurdles

Use single leg

## Proprioceptive/balance and coordination Programme

Using cones mark out circuits and perform agility drills

Straight line (8 x 20m) 10 reps



Oval (8 x 20m) 10 reps



Circle (8 x 10m) 10 reps



Soft zig-zag (8 x 20m) 10 reps

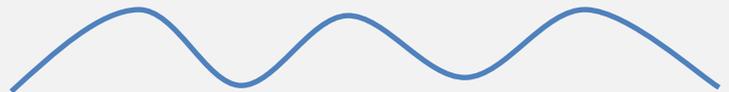
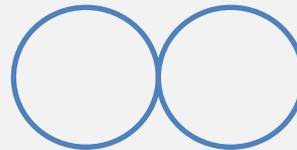
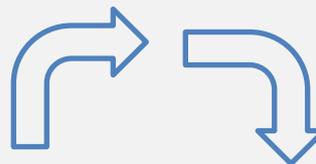


Figure of eights (8 x 10m) 10 reps



90 degree turns (10 x 20m)



45 degree turns (10 x 20m)



Cutting (20 x 10m)



### **Shuttle runs**

Once they have been running successfully then introduce as desired and required stop start running, shuttle runs, cutting and turning and downhill running.

**Modified T-Test** (running agility and directional change rehab) (Paoule et al 1996, Hickey et al 2009, Myer et al 2006)

### **General Mobility and cardiovascular programme**(Herrington et al 2013)

Progress as below

1. sports specific rehab- kicking and ball work
2. normal training
3. easy low grade match
4. return to full competition

**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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