



# Cannulated screw fixation advice and exercises

This advice is for patients who have had a cannulated screw fixation following a fractured neck of femur (hip fracture). This information is designed to help you get back to full fitness as quickly as possible after your operation.

Before you leave hospital a physiotherapist will teach you all the exercises on this leaflet and make sure that you do not have any problems.

### What is a cannulated screw fixation?

Cannulated screws are inserted where the neck of femur has been fractured and where there is a good chance that it will heal if held in place by internal fixation.

In this case, the internal fixation consists of 3 large screws placed through the neck of femur into the head. These will remain in place permanently even once the fracture has healed.

Following your operation you will be encouraged to mobilise as soon as possible and you must make sure that you are receiving adequate pain relief to allow you to do this. Normally, you will be sat out of bed the day after the operation with assistance and a walking aid. You will be non-weight bearing, or if the doctors allow minimally weight bearing for a period of six weeks.

Mobility will be progressed during your admission with the physiotherapist. He/she will advise you on how far you should be mobilising and what walking aids are appropriate for you (usually a walking frame initially and then progressing to crutches if able).

It is also important that you exercise to strengthen the muscles around the damaged hip. Your physiotherapist may advise you of additional exercises that may also benefit you.

#### **Pain**

After your operation some pain may persist for a further few weeks and you should use this as a guide when increasing your daily activities. A moderate ache which settles quickly is acceptable, severe pain which takes hours to settle is not. If you experience sharp pain, stop activity immediately. If symptoms persist contact your GP for advice.

#### Wound care:

On discharge you must arrange an appointment with your practice nurse for a wound check 10-12 days post-op.

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If you have any concerns about your wound i.e. it is red, weeping or bleeding please call the **Orthopaedic Outpatients Department on 0118 322 6938.** Please note this is an answer service only. It is checked in the morning on working days only (not weekends or bank holidays). Please leave a message and you will be contacted with an appointment as soon as possible.

If you feel the problem cannot wait, please leave a message and then either contact 111 for advice or attend your local Emergency Department (A&E). If you feel unwell or feverish and particularly if the wound appears infected please attend your local A&E.

## **Swelling**

The swelling in the leg may remain for as long as three months. Having a rest period on the bed with the legs elevated (raised up) for a few hours a day will help control the swelling.

## **Mobility / walking**

You will need to use your frame/crutches for as long as you are non/minimal weight bearing as you have been taught. When advised to do so by your doctor or physiotherapist you should gradually increase the amount of weight taken on the operated leg.

Once fully weight bearing you may still need to use some sort of walking aid as you may still have a limp due to muscle weakness, become tired when walking further than expected or come to unforeseen obstacles.

## Sitting down / standing up

To stand up shuffle to the front of the chair, tuck your feet back underneath you. You may find it more comfortable initially to place the operated leg out in front of you. Push up with both hands on the arms of the chair, or push up with one hand on the arm of the chair holding your crutches in the other. Once balanced place both hands on the frame or crutches in both hands.

To sit down, stand close enough to feel the chair against the back of your legs. Either let go of the walking frame and reach back to the arms of the chair with both hands or place both crutches in one hand and place the other on the arm of the chair. Step your operated leg forward and gently lower yourself into the chair.

Do not use the frame to pull yourself up or stand up or sit down with your hands still in the crutches.





## Walking with a frame / crutches

Move the frame or crutches first.

#### If you are non-weight bearing:

 Push down through the frame or crutches and hop forward with your nonoperated leg.

## If you are weight bearing:

- Step forward with operated leg first.
- Push down through the frame or crutches and step forward with your non-operated leg.



#### **Stairs**

Your physiotherapist will practice stairs/steps with you prior to discharge if necessary. You may need to use crutches on the stairs if you only have one or no rails. You may also need to have an extra frame/ crutches to enable you to have something to walk with when you reach the top of the stairs.

## Ascending (going up stairs)

- Hold on to your hand rail.
- Place your crutches in the opposite hand.

## If you are non-weight bearing:

- Hop up onto the step above.
- Bring your crutches up to the step that you are on.

#### If you are weight bearing:

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- Step up with your un-operated leg first, then your operated leg.
- Followed by your crutches.

## Descending (going down stairs)

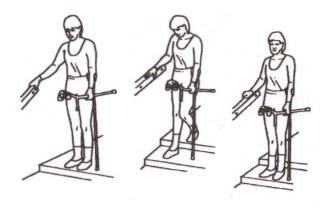
- Hold on to your handrail and place your crutches in the other hand.
- Place your crutches down one step.

#### If you are non-weight bearing:

• Hop down onto the step below.

#### If you are weight bearing:

 Step down with the operated leg first, follow with the un-operated leg.

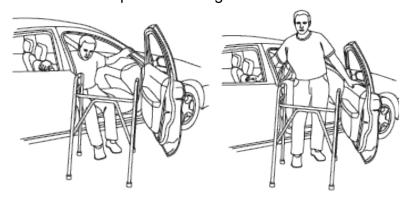


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## Getting in/out of the car

- Positioning the car: you should sit in the front passenger seat of the car after your operation as there is more leg room. Make sure the car is parked away from the kerb, so you can be on the same level as the car before you try to get in.
- Push the seat back as far as possible and slightly reclined. Go bottom first into the car and lower yourself slowly to the edge of the seat. Use your arms and lift your bottom further across the seat towards the driver's side. Lift your legs into the car slowly.
- A plastic bag will help you swivel your legs in more slowly, but must be removed before you drive off.
- Reverse this procedure to get out.



## **Driving**

- Don't drive until you are fit enough to do an emergency stop. This is normally 6-8 weeks after the operation; however if you have an automatic car and have injured your left leg you may be fit to drive earlier.
- In order to drive you need to be nearly pain free, not be dependent on walking aids, have a good range of movement and have sufficient reflexes to manage an emergency stop.
- Remember to have a "test drive" and practice an emergency stop with an experienced driver.
- You need to contact the DVLA and your insurance company if you are not driving after 3
  months because of the hip fracture. Failure to do so can result in a fine and prosecution if you
  are involved in an accident.

#### Work

Check with your GP when you can go back to work. If you have a desk job you will be able to return sooner than if you have a very active job. If you have a very physical job this may be as long as 3 months.

## Sports and hobbies

- Low impact activities such as walking, swimming and gardening are recommended.
- High impact activities should be avoided till around 3 months post-op to ensure fracture healing.
- All heavy activities such as digging and heavy lifting should be avoided for 3 months post-op.

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#### General advice

- Do have regular rest periods each day.
- An increased ache in the hip region usually means that your level of activity has increased.
- If you experience a sharp pain, stop activity immediately.
- If symptoms persist, contact your GP for advice.
- Aim to be as active as you can within the limits of pain.

## **Discharge**

When the ward team feels you are ready, you will be discharged, either home or to a further rehabilitation centre. Before leaving, your physiotherapist should discuss with you which exercises to continue at home and how to progress your mobility.

Follow up appointments will be arranged in Fracture clinic to ensure that the fracture is healing. When you can progress to full weight bearing will be determined at this appointment. Once fully weight bearing and felt necessary by the Doctor you may be referred to outpatient physiotherapy.

#### **Exercises**

The following exercises should be started the day after your surgery and should be done a minimum of 5 times each, 1-2 times a day with each leg. Your physiotherapist will help explain how to do them.

If this results in no increase in your pain and swelling, you can increase the exercises to 10 times each, 3-4 times a day.

## 1) Static quads

- Lying with your legs out straight in front of you, tighten the muscles on the front of your thigh by squashing your knee down in to the bed and pulling your toes up towards you.
- Hold for a count of 5-10, relax completely.
- Repeat 5-10 times.

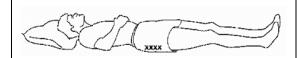
#### 2) Gluteal squeeze

- Squeeze your buttock muscles together as tightly as possible for a count of 5-10, relax completely.
- Repeat 5-10 times.

#### 3) Hip flexion / heel slide

- Lying with your legs out straight in front of you, slide the heel of your operated leg up towards your bottom, allowing your hip and knee to bend. Slide your heel back down again, relax completely.
- Repeat 5-10 times.

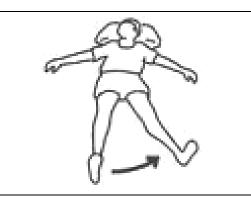






## 4) Hip abduction

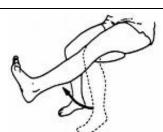
- Lying with your legs out straight in front of you, keeping both legs straight and your toes pointing towards the ceiling throughout, move your operated leg out to the side slowly.
- Return your leg to the start position, relax completely.
- Repeat 5-10 times.



Once you are out of bed you can progress to the following exercises. Make sure you are holding on to a firm surface for all standing exercises. Again you should be doing 5-10 of each exercise, 2-4 times a day.

## 5) Long arc quadriceps

- In your chair, kick your foot forward and straighten your operated leg slowly, hold for 5-10 seconds and slowly lower back down.
- Relax completely.
- Repeat 5-10 times.



## 6) Hip flexion

- Slowly lift the knee of your operated leg towards your chest.
- Lower your foot back down, relax completely.
- Repeat 5-10 times.



## 7) Hip extension

- Keeping your body upright throughout the exercise, slowly move your operated leg as far back as possible.
- Return to the starting position, relax completely.
- Repeat 5-10 times.



### 8) Hip abduction

- Keeping your body upright throughout the exercise.
- Slowly move your operated leg out to the side, keeping your toes pointing forwards.
- Return to the starting position, relax completely.
- Repeat 5-10 times.



#### Six weeks onwards

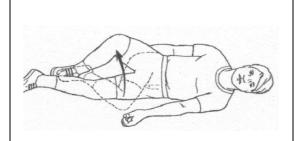
You can now try the following exercises when you are confident to do so. Everybody is different and if you feel these exercises are too difficult for you don't worry either miss then out or leave them for another time.

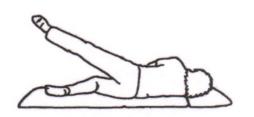
#### Clam shell

- Lie on your opposite side.
- Bend both knees.
- Twist your top leg until your knee is pointing towards the ceiling or as far as you can.
- Do not allow your hips to roll backwards.
- Hold for a few seconds, relax.
- Repeat 5-10 times.

### Hip abduction in side lying

- Lie on your good side, with the knee of your operated leg straight or only slightly bent. Lift your leg towards the ceiling taking care to not turn the toes towards the ceiling or to roll backwards.
- Hold for a slow count of 10, relax and repeat 5-10 times.

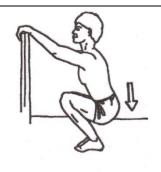




The following exercises should be attempted only once you are fully weight bearing. This is usually about 6 weeks post-op, but please be guided by your doctor or physiotherapist.

#### Half squats

- Stand holding onto something solid.
- Bend both knees.
- Go as far as you can comfortably then return to the upright position.
- Repeat 5-10 times.



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## Heel raises in standing

- Stand, holding onto something solid.
- Rise up and down on your toes, lifting your heels off the ground.
- Repeat 5-10 times.



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## Step ups

- Stand facing the stairs.
- Place operated leg on the bottom step.
- Hold onto the banister, and try and lift your weight up on the operated leg and place your other foot on the bottom step.
- Lower the good foot back down to the floor.
- Repeat 5-10 times.

## Step downs

- Stand on the bottom step facing down the stairs.
- Hold onto the rail.
- Try and lower your good leg to the floor.
- Straighten up and return foot to the bottom step.
- Repeat 5-10 times.

## Single leg balance

- Hold onto something solid.
- Put all of your weight onto the operated leg and lift your good leg off the ground.
- To make this exercise harder, let go of your support.
- Aim to build up to holding this position for up to 30 seconds, repeat 5 times

#### **Bridging**

- Lie on your back with your knees bent.
- Tuck your hips under and lift your bottom off the bed until your hips are in a straight line with your knees and shoulders.
- Hold for a slow count of 10.
- Relax and repeat 5-10 times.









### **Useful numbers and contacts**

Royal Berkshire NHS Foundation Trust	Royal Berkshire NHS Foundation Trust	
Orthopaedic Physiotherapy Department	Occupational Therapy Department	
Royal Berkshire Hospital	Royal Berkshire Hospital	
London Road, Reading RG1 5AN	London Road, Reading RG1 5AN	
Tel: 0118 322 7812	Tel: 0118 322 7560	
Elderly Care Physiotherapy Department	Hurley Trauma Unit:	
Woodley Ward	Hurley Trauma Unit: 0118 322 7335 or 0118 322 7336	
Woodley Ward	0118 322 7335 or 0118 322 7336	
Woodley Ward Battle Block	0118 322 7335 or 0118 322 7336 Emmer Green Ward:	

Visit the Trust website at www.royalberkshire.nhs.uk

# Please ask if you need this information in another language or format.

RBFT Physiotherapy Department.

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