Orthopaedics Department

Hip Fracture: Treatment, Care and Recovery

You have been unfortunate enough to break your hip. This can be a painful, frightening and confusing experience for you and your family. This booklet has been written by hospital staff including nurses, doctors, physiotherapists, occupational therapists and social workers, to answer some of the questions you may have about your injury, how it is to be treated and life afterwards. It explains what will happen to you in hospital and how staff will help you recover from the injury. We hope this information will reassure you concerning things you may be worried about. It will also help you remember what you have learned while in hospital.

If there is anything about your treatment that you don't understand or are worried about, please ask a member of staff. We are here to help you.

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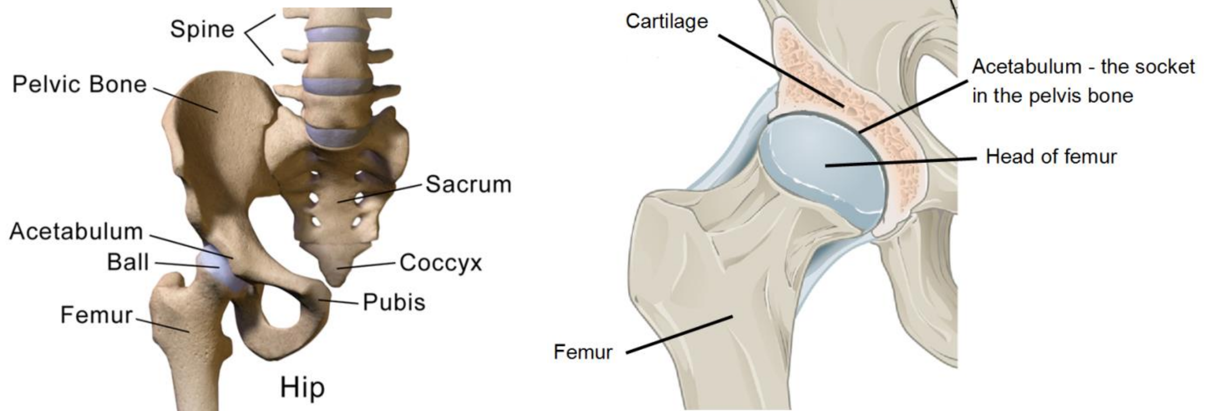
About Hip Fractures:

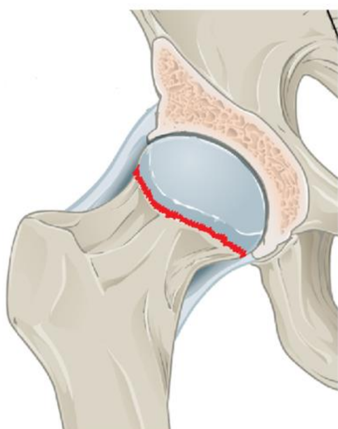
The hip is a ball and socket joint. The ball is the top (head) of the thigh bone (femur), which is connected to the rest of the bone by the 'neck' of the femur. The head of the femur fits into the socket of your pelvic bone to make your hip joint. This socket is called the acetabulum. There is a strong but flexible joint capsule that surrounds the hip joint. It helps to give stability to the joint and also produces a fluid called *synovial fluid* to give lubrication and help joint movement (please see illustration below).



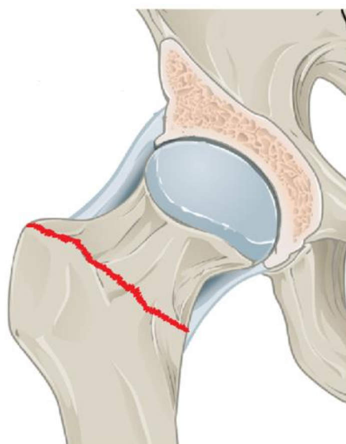
A 'hip fracture' usually means that the neck of the femur has been broken. Thus, the medical term for this injury is **'fractured neck of femur'**. It can occur inside the hip joint (known as an intracapsular fracture) or just outside it (extracapsular).

A hip fracture can also be *displaced* or *non-displaced.* A displaced fracture is a fracture where the broken bones have moved out of their normal position. If the bone fragments have moved, they need to be put back (reduced) into their normal alignment. In a non-displaced fracture, the bone fragments, even though they are broken, are still aligned in their normal position.

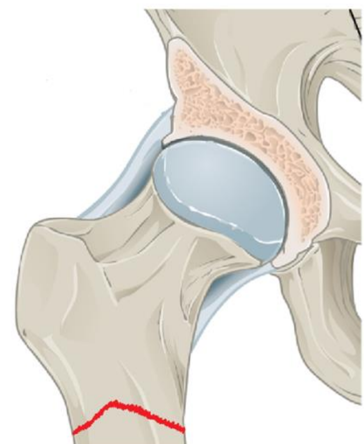
Types of hip fracture:



Non-displaced intracapsular hip fracture



Non-displaced extracapsular hip fracture



Non-displaced extracapsular hip fracture

Hip fractures are a common injury and they happen mostly to older people. Most people who break their hips have osteoporosis, a disease of the bones which makes them more

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fragile. You are also more likely to suffer a hip fracture if you are unsteady on your feet and tend to fall. This can be for a number of reasons, including: illness or certain medical conditions, the effects of some medications, poor eyesight or hazards at home, or if you are thin with less ‘padding’ over the hips.

A hip fracture is a serious injury but most people recover well from it and are able to return home, although many will require extra support once home. However, the operation involved is major surgery which does carry a risk of mortality. How well you cope with the surgery will depend to some extent on how fit and well you were before the injury.

At Dorset County Hospital, we give a high priority to people with hip fractures and follow a structured plan for your care which aims to give you the best chance of a successful recovery. This process is described in more detail later in this booklet. Your care will be managed by both an Orthopaedic Surgeon and a Consultant in Medicine for the Elderly, working in collaboration with the anaesthetic teams, nurses and therapists.

When You Arrive at Hospital:

By the time you read this you will already have come through the Emergency Department where the Emergency team will have assessed how well you are, how much pain you are experiencing and given you medicine to help relieve the pain. If necessary, you will have been given fluids in a ‘drip’ to make sure you do not become dehydrated. You will have had X-ray pictures of the hip taken.

On the ward you will have met the nurse who will be looking after you. A doctor will see you, ask you some questions, and examine you. The doctor and nurse will make a detailed assessment of your state of health and home background so that we can make the best plans for your care and safe return home.

A broken hip is usually painful. The staff will make sure that you are kept as comfortable as possible. This may involve a pain relief injection into the groin. Or sometimes, it can involve straightening the leg with weights, which is called ‘traction’. These options will be considered for you, but they are not used for all patients with a hip injury.

You will be assessed by one of the doctors to measure your risk of a blood clot and, depending on the result of this assessment, you may be measured to wear compression stockings and intermittent compression boots/calf pumps whilst you are less mobile during recovery. These help to reduce the risk of you developing a blood clot.

The Care Pathway - How We Look After You:

We use a structured plan called a ‘care pathway’ to look after people with hip fractures. This helps to ensure that we give you the best possible care and treatment at the right time and helps us to keep a close eye on your progress so that we can adjust the care to suit your own particular needs.

In the care pathway, each day has specific observations which will be made about you, and specific things which need to be done to help you. Everything is written down in the Care Pathway document, which is used by all the staff who are dealing with you – including doctors, nurses, occupational and physiotherapists, and social workers. This helps them to work together as a team to help you.

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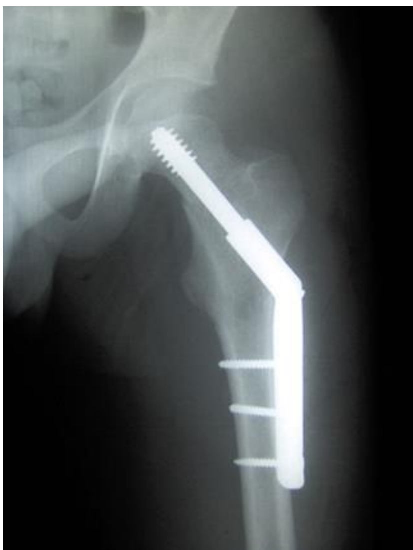
Please ask the staff if you do not understand anything. Don't worry if events do not occur at the exact time stated on the plan as it is just a guideline. Because every patient needs to be treated individually, and because everyone progresses at different rates, the care team will use their professional judgment and experience to determine the best care for you.

Your Operation - Mending the Broken Bone:

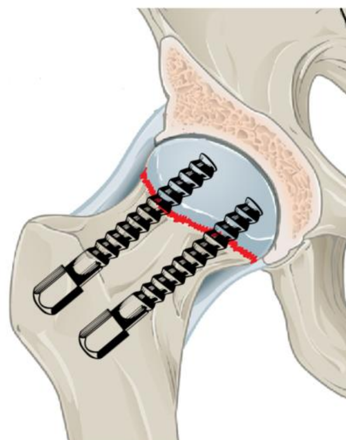
Almost all hip fractures need an operation to fix them. The sooner the operation is done the better it is for your recovery, however it is important that we make you as fit as possible to undergo the surgery and anaesthetic. We aim to do all operations within 36 hours of admission to the hospital and they are all done by experienced Orthopaedic surgeons. There is more than one kind of hip fracture and the type of operation you have will depend on the type of fracture.

The hip joint is a ball and socket joint. The ball is the top (head) of the thigh bone (femur), which is connected to the rest of the bone by the 'neck' of the femur. Where possible, the surgeon will try to preserve the head of the femur (the ball), however this will depend on where the fracture is located in the neck of your femur. We preserve the head of your femur by "fixing" the fracture either by: 1) using one large screw and a plate (known as a dynamic hip screw, or DHS – see picture below); 2) three smaller screws (known as cannulated screws) or 3) an intramedullary nail.

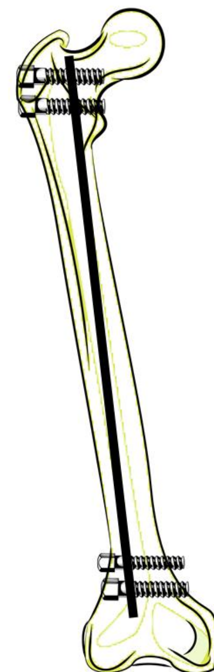
1) Dynamic Hip Screw (DHS)



2) Cannulated Screws



3) Intramedullary Nail



Often, however, it is necessary to replace the joint, therefore removing the broken part of your neck of femur. This is done with either 4) a half hip replacement (hemiarthroplasty) which replaces the ball part of your hip or 5) a total hip replacement, which replaces both the ball and socket parts of the joint (see illustrations below)

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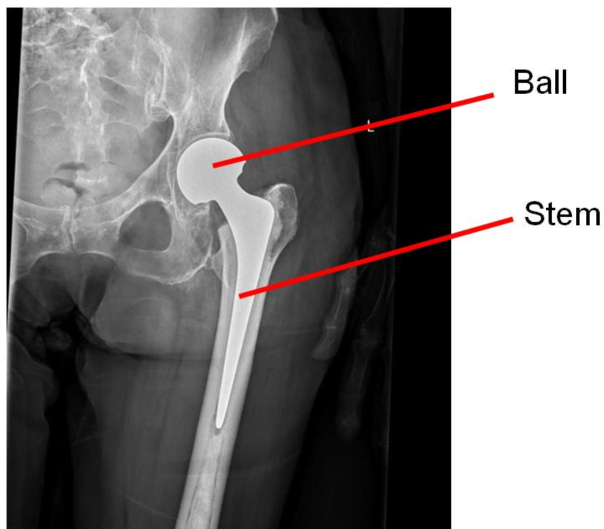
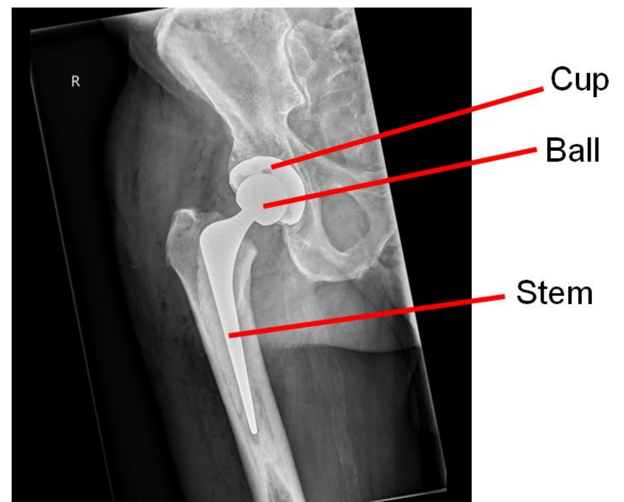
4) Hemiarthroplasty (half a hip replacement)



5) Total hip replacement



For your safety, operations will need to be done when your stomach is empty. Therefore you will be given nothing to eat for at least six hours before the operation and nothing to drink for at least two hours before the operation. You may be given fluids via a 'drip' to stop you from becoming dehydrated. You will be given a bed bath and dressed in a cotton gown before the operation. You will be taken to the operating theatre on your bed by one of the nurses and a theatre porter.

The Orthopaedic doctors will speak to one of the anaesthetic doctors about your surgery and the anaesthetic team will see you on the ward, or in the holding bay before your operation. The anaesthetic doctor may recommend your surgery is done under a general anaesthetic, a spinal injection, or a combination of both.

After the operation, you will wake up in the recovery room where a nurse will be looking after you. You may be attached by wires to an observation machine, a heart monitor and you may also still have the fluid drip into your arm.

If you feel up to it after about an hour you may start to drink and eat again. You will be given painkillers as you need them.

Sometimes people become confused for a short period after the operation. There are many possible reasons for this, including the effects of the anaesthetic. However, it does not happen to everyone and normally resolves quickly.

Stitches or staples are used to close the surgical wound on your hip. These are usually removed between 10 and 14 days after the operation.

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Post-Operative Complications:

It is important to recognise that a hip fracture is a significant injury to sustain. Many people with a hip fracture also have other medical, social and mental health conditions that pose problems for their operation and recovery. Nationally, there has been a steady improvement in the number of people surviving a hip fracture, but a proportion of the frailest will die in the weeks following this injury. In most cases this reflects how unwell they were before they suffered the hip fracture. To discuss your individual treatment, please do not hesitate to ask a member of the Orthopaedic team who will be able to discuss your risk factors with you.

Fortunately, most patients do not develop any problems after repair of their hip fracture but you should be aware of possible difficulties which include:

Infection: this is rare (less than 5 per cent of patients experience infections) but can be a serious complication which may result in the screws or artificial parts being removed.

Deep vein thrombosis: blood clots may form in the veins in the leg as a result of the injury or after the operation. Rarely, the clot may move to the lungs which can be serious. Every patient is assessed to measure their risk of developing a blood clot and if appropriate interventions made to help minimize this risk.

Pressure sores: can result from lack of movement and can occur before or after the operation. We pay special attention to prevent sores from developing.

Constipation: is common after hip fractures and laxative medication may be required. It is also important to drink good amounts of fluid and include sources of fibre in your diet such as fruit and vegetables.

Retention of urine: (inability to empty the bladder) may occur after surgery and may require a catheter tube for relief, but this is usually only needed for a short time.

Chest infections: sometimes occur and can be treated with a course of antibiotics. Again, every possible step is taken to help keep this risk to a minimum.

Reduced appetite: It is important to have a balanced diet with good amounts of protein and energy to help with your recovery. Eating well can also help prevent complications such as pressure sores and constipation. If you have a reduced appetite and/or have lost weight without trying please tell your nurse or doctor. During your admission you may be given nutritional supplement drinks to take. These will give you extra energy and protein.

The Next Day after the Operation (and the first few days):

You will be seen by your doctor, and also by the physiotherapist who will start helping you to get back on your feet. We know that for most people who have a hip fracture, the sooner they start getting back on their feet the better their recovery will be. Moving helps the hip to heal and reduces the risk of other complications.

The First Few Days after the Operation:

You will have an X-ray of your hip if one wasn't taken during the operation. The doctors and nurses will continue to keep a close eye on your progress using your Care Pathway.

You will be seen by a Medicine for Older People consultant who will discuss with you:

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- How your injury happened – whether it was accidental or whether there may have been underlying causes, for example a medical condition. The consultant will decide if any further tests are needed to help prevent you from falling again.

- Any other illnesses you may have which need treatment now.

- Your bone health and whether any intervention can be offered to help reduce the chances of you breaking a bone in the future

- Arrangements for rehabilitation and getting you home.

Getting Back on Your Feet:

The physiotherapists and nurses will help you get back on your feet. A member of the physiotherapy team will teach you how to walk using an appropriate walking aid. Once it is safe to do so, we encourage you to mobilise independently to regain strength and confidence. The exact plan will depend on which operation you have had – the physiotherapist will talk you through this.

Below are some general tips and advice for getting around:

Walking:
Try to take normal strides.

Initially, you will need to move your walking aid forward first. Then step forwards, leading with your operated leg. Then bring your other leg level.

Do not swivel or twist on the spot when you want to change direction – always step your feet around gradually.

In these photos, the RIGHT leg is the "BAD" leg:

Getting in / out of bed:
The staff will show you how to get out of bed properly, but here are some tips to help:

Using your arms to support you, try to bend forwards at the waist.

Gradually move your legs over towards the side of the bed. You may need some assistance initially to move your operated leg.

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Pivot yourself around and gradually move your bottom towards the side of the bed. Using your arms to push up from the bed and taking the weight through your good leg, you can then stand up.

To get back on the bed, position yourself so you can feel the bed on the backs of your legs. Reach down behind you for the bed and use your arms to help guide yourself down.

Keep your operated leg out in front and gently lower yourself by bending your good leg. Make sure your bottom is as far back on the bed as possible then lift your legs back on to the bed and pivot yourself around.

If you are struggling to move your operated leg, some people find it helpful to ‘hook’ their good leg underneath the operated leg to assist with the movement.

NB depending on what operation you have had – you may be advised to get out of bed on the side of your operation and return to bed on the side of your operation. For example, if your *right* hip was operated on, exit the bed *right* leg first, then enter the bed *right* leg first. The staff will be able to advise if this applies to you.

Sitting and standing:
Do not sit on a low chair (or toilet).

Do not put your feet up on a stool if you have had a hemiarthroplasty or total hip replacement operation.

Do not cross your legs (or ankles).

When you go to stand, keep your operated leg out in front. Move yourself to the front of the chair. Take your weight on your good leg and push yourself up using the arms of the chair.

When you sit down, first of all make sure you can feel the chair on the backs of your legs. Keep your operated leg out in front and gently lower yourself by bending your good leg. Use the arms of the chair to help guide yourself down. Move yourself to the back of the chair and do not cross your legs (or ankles).

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In these photos, the RIGHT leg is the "BAD" leg:

Stairs:
If you need to use stairs at home, the physiotherapist will teach you how to manage them safely before you go home.

Remember to use your **GOOD** leg to lead when you are going UPstairs and your **BAD** leg to lead when you are going DOWNstairs.

In these photos, the RIGHT leg is the "BAD" leg:

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In these photos, the RIGHT leg is the "BAD" leg:

A member of the Occupational Therapy team will also see you whilst you are in hospital, to talk with you about ways to manage independently in your day to day life whilst you are rehabilitating from your broken hip.

The occupational therapists will be involved in planning your discharge from hospital and will ensure that you can manage as safely and as independently as possible. They will be able to offer you and your family advice about any equipment you may need to regain as much independence as possible whilst recovering from your broken hip. They will also be able to advise about any hazards which may be in your home, which may cause you to fall again, and offer you suggestions on how to remove these hazards.

How Precautions Will Affect Your Day to Day Life:

Kitchen Tasks:

If possible, consider asking family members to move items that you will use regularly to the work surface or to a higher cupboard/drawer/fridge shelf. This will ensure that you do not need to bend down. A high stool or chair may be useful in the kitchen to enable you to rest during tasks or whilst waiting for things. If you can, eat in the kitchen. If this is not possible, the occupational therapist will discuss other options with you.

Eating and drinking:

It is important that you maintain good nutrition and hydration whilst recovering at home. Take up any offers from family or friends to help with food shopping. Alternatively, you may consider online grocery shopping. If you struggle with food preparation and cooking, consider having microwavable/ ready meals or using a meal delivery service (please ask staff for assistance with selecting a meal delivery service). If you are losing weight and/or eating smaller amounts it is important that you mention this to your GP. The GP may then refer you to the dietitians for further advice.

For more information, please refer to the patient and carer resources section on the *Managing Adult Malnutrition in the Community* website: www.malnutritionpathway.co.uk.

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Showering:
Your dressing over the wound will be waterproof so you will be able to get it wet. If you have a cubicle shower and the Physiotherapist is happy for you to go up/down a step, you can shower. If you have a shower over your bath, we advise you not to use the shower for at least six weeks because lifting your legs up and over the bath to use the shower will put your hip at risk of dislocation.

Getting Dressed:
You will be able to dress your upper half normally but will need *small aids* such as a helping hand (AKA grabber) to assist you dressing your lower half or physical help. You can purchase a long handled shoe horn to help you put on your pants and shoes. Below is some advice about how to dress the lower half of your body without reaching past your knees. The Occupational Therapist will check that you can manage this before you return home.

Dressing the lower half of the body:
Sit on a chair or the edge of your bed with your clothes and small aids nearby. Get your operated leg dressed first. The long handled shoe horn has a hook at the other end which can be used to "hook" your pants over your feet and up to your knees. Once you have them up to your knees, you can grab hold of them. These small aids are highly recommended to enable you to do things independently. However, they need to be purchased privately as the hospital is unable to provide them.

Rehabilitation and Going Home:

We aim to discharge patients to their usual home as soon as they have recovered sufficiently from the operation, are managing to mobilise safely and undertake certain activities with a degree of independence. Recovery often takes between five to eight days following your surgery. Sometimes, people progress to a stage where they are mobilising safely enough to be discharged home but they may benefit from some additional therapy at home to reach their full potential. This can be done by one of the number of *Community Rehabilitation Teams* throughout Dorset. The hospital staff will discuss this with you if they feel this may be appropriate.

Some people however need a longer period to regain their strength, improve their walking and recover some confidence. This is called *rehabilitation*. They may also have had problems with getting around or with looking after themselves before the injury. This may mean that new arrangements have to be made before they can go home safely. There is a wide variation in the length of time it takes for people to get home, and everyone needs to be assessed and treated on an individual basis.

If you need rehabilitation, then one option is to be transferred from an acute hospital (such as Dorset County Hospital) where you have had your operation to one of the *community hospitals* in the area. The staff at the community hospitals will continue the rehabilitation process with the aim of helping you regain your independence and return home safely.

In this region there are community hospitals in Weymouth, Portland, Bridport, Sherborne Swanage, Wareham and Blandford. Unfortunately, there is no community hospital in Dorchester. We will try to place you in a hospital near to where you live, but because these hospitals are very busy this may not always be possible. Also, there is usually a waiting list

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as demand for beds is very high. In the meantime, the staff at the acute hospital will continue to work with you to help you get better.
If you live outside the local area and need rehabilitation before going home, we will try to arrange a transfer to your local hospital.

Wherever you have your rehabilitation, you will be seen by qualified professionals who will work with you to restore your independence and help you get back home.

After you get Home:

While you are still in hospital, the occupational therapist and physiotherapist will advise and answer any questions you may have concerning how best to do things after your operation. The therapists will also be able to advise you on what you will or will not be able to do in the future. The advice will depend on the type of operation and any other health problems or disabilities you may have. Please feel free to ask about anything that concerns you.

You should continue to follow the advice mentioned earlier in this booklet:

- Do not twist or cross your legs when getting in or out of bed
- Do not sit on low chairs
- Do not cross your legs/ankles when sat down
- Use the methods given on page 8 regarding getting up from a chair
- Do not bend from the waist to reach items below waist level, or overstretch

Walking:
There are no specific rules about how much walking you should do and when. However, below is some general advice to help improve your walking after you have returned home:

- Continue to use the walking aids you have been given on discharge from the hospital.
- To begin with, try to walk on even surfaces, preferably on the flat.
- Try to pace your activity – for example, it is usually better to do a short walk twice a day rather than a longer walk just once a day.
- Gradually increase the distance you walk. You do not need to push yourself too hard, but try to do a little more each day. For confidence, many people find it helpful to have someone with them when they first start walking outdoors.
- It is important to rest regularly throughout the day as you will feel tired.

Bathing:

- Do not use a bath for the first six weeks after your operation
- Instead have a walk-in shower or a strip wash

Picking items up:

- If you drop something, either ask somebody else to pick it up for you or use the helping hand aid to reach to the floor
- Do not bend down yourself
- Avoid twisting your body at the waist. If you are reaching for something at your side, turn your whole body around to face the item

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Getting in/out of a car:

- Have the car seat as far back as possible and partially reclined
- Get into the car from a level surface (when the car is parked in the road or drive) and NOT from the elevated pavement
- Get into the car with your bottom first and gently lower yourself down
- Slide back over the seat until your bottom is near the driver's seat
- Swing both legs into the car together, in one gradual movement – remember not to twist
- Bend your knees as you get into the car
- To exit the car – use the same process, but in reverse.

NB you cannot drive a car for at least six weeks after your operation and we strongly advise you to contact your motor insurance company prior to recommencing driving.

General Precautions:

- Avoid sleeping/lying on your operated side (you must have a pillow between your legs when lying on your non-operated side)
- Do not cross your legs/ankles
- Do not bend at your waist more than 90 degrees
- Avoid sitting in low chairs or prolonged sitting
- Do not twist or rotate your new hip/operated leg by overstretching to either side

Do **not** cross your legs or ankles when lying in bed or when sitting:

Do **not** bend at your waist more than 90 degrees

Finally:

This booklet contains general guidelines. Each person is different and you will have your own rate of recovery. If you have any questions or worries, please ask a member of staff.

We wish you a speedy recovery!

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Contact Numbers:

We hope that you have found this information useful. If you have any questions or are worried about anything, please speak to your family doctor (GP) or the following Dorset County Hospital Staff:

Consultants (contact made via Consultant secretaries):

Mr Barlow	01305 255413
Mr Ward	01305 255515
Mr Garrett	01305 254696
Mr Savva	01305 254483
Mr Findlay	01305 255549
Mr Senior	01305 254696
Mr Walsh	01305 254483
Mr Crook	01305 255515
Mr Smith	01305 255549

Trauma Coordinator:	01305 256966
Purbeck Ward:	01305 255592 or 01305 255593

Useful Websites:

NHS Choices
https://www.nhs.uk/conditions/

The National Hip Fracture Database
www.nhfd.co.uk

National Institute for Clinical Excellence
www.nice.org.uk

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If you have feedback regarding the accuracy of the information contained in this leaflet, please email pals@dchft.nhs.uk.

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