

Surgery for hip fracture:

Internal fixation of intracapsular fracture

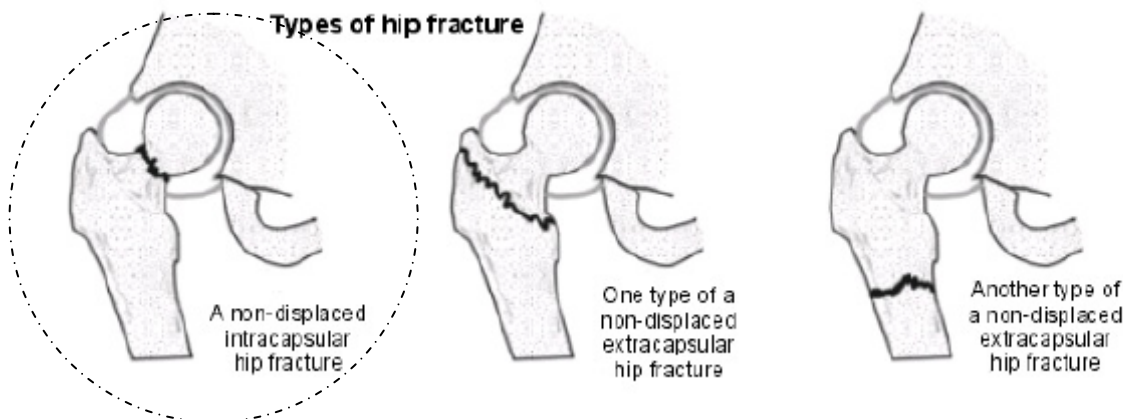
This leaflet aims to answer your questions about having surgery for a hip fracture. It explains the benefits, risks and alternatives, as well as what you can expect when you come into hospital and after you have gone home. If you have any further questions, please speak to a doctor or nurse caring for you.

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What is a hip fracture?

The hip joint is made up of the top of the thigh bone and the pelvis. This joint is surrounded by a fluid-filled sac called the capsule. The hip can break inside the capsule (an intracapsular fracture) or outside the capsule (an extracapsular fracture). You have an intracapsular fracture (1st diagram, circled) and so you will need an internal fixation operation to fix this.



**Fracture inside the capsule
(intracapsular)**

**Fracture outside the capsule
(extracapsular)**

**Fracture outside the capsule
at top of the thigh bone
(subtrochanteric)**

Why has internal fixation been recommended for me?

Internal fixation is used when the surgeon would like to preserve your hip joint rather than replace it. The surgeon will use either a dynamic hip screw (DHS) or cannulated screws, to fix fractures inside the capsule of the hip joint.

Your surgeon advises that you need an internal fixation because of where your fracture is, as well as your general health and level of mobility. Your surgeon will discuss it with you in more detail before the operation and give you the opportunity to ask questions. Further information on internal fixation is given on page 5.

Why should I have surgery for my hip fracture?

Having the surgery will relieve your pain and help to restore your mobility. Your fracture will not heal without surgery and you may develop complications associated with reduced mobility such as pressure sores and chest infections.

What are the risks?

In addition to the general risks of hip fracture surgery (listed below) an internal fixation operation carries the risk of **avascular necrosis (AVN) / non union**. Because the blood supply to the head of your femur (thigh bone) has been damaged by your fracture, there is a risk that the fracture won't heal or that the femoral head could partially collapse, which would mean that you require further surgery. You can help to avoid this by restricting pressure on the hip when you walk for a few weeks following your surgery. Your physiotherapist will instruct you on how to do this. It is important that you are followed up regularly in the fracture clinic afterwards to check on the progress of healing.

In the majority of cases hip surgery is carried out very successfully without any problems. Occasionally, however, patients are at risk of the following general complications:

Bleeding: It is normal for you to lose blood during your operation. Some people may need a blood transfusion to replace the blood lost. There can also be bleeding after the operation. This may result in a collection of blood (haematoma) beneath the wound site. Very occasionally, blood continues to collect and you may experience extra swelling and pain. This may mean you need to have more surgery to find the cause of the bleeding and stop it. This is uncommon.

Infection and wound complications: A wound infection can occur at any time following surgery, but again, this is not common. Signs include increased redness or swelling, discharge from the wound and a raised temperature. This can usually be treated with antibiotics and dressings. Very rarely further surgery may be required.

Nerve damage: The hip joint is surrounded by a number of nerves. Since the surgeon has to work close to these nerves, there is a very small risk that they may be damaged. This can result in numbness or muscle weakness such as a foot drop (inability to lift the foot and toes properly when walking), but the risks of this are minimal.

Leg length: As the fracture heals, the bone sometimes shortens slightly. It is not usually noticeable, but occasionally patients require a shoe raise (a shoe adaptation to even out the length of your legs).

Following your surgery, we encourage you to be up and out of bed as quickly as you can manage. This is so that you do not risk complications related to reduced mobility. These include:

1. **Blood clots, deep vein thrombosis (DVT) or pulmonary embolism (PE):** This is a risk following any major operation, due to the surgery itself, blood loss and your reduced mobility. Your risk will be assessed by your surgical team and you are likely to be given a small dose of an anticoagulant (blood thinning) medicine each day to prevent these complications. This is usually a subcutaneous (under the skin) injection and may be continued when you go home for a total of 28 days after your surgery. Your nursing team will teach you how to do this. If you have any questions your nurse will answer these before you leave.

You will be measured and fitted with anti-embolism stockings. These stockings reduce the risk of blood clots by improving the blood flow from your feet and calves back to your heart. You will be shown some exercises to do to aid circulation in your legs whilst you are not mobile.

2. **Pressure ulcers (sores):** Whilst your mobility is reduced, you are at risk of developing pressure sores. To help prevent this you will usually be nursed on a special pressure relieving air mattress and will wear padded boots to protect your heels. You can help by moving around as nurses and therapists advise.
3. **Chest infection:** This occasionally happens after surgery and we will treat it if it occurs. Regular deep breathing and movement soon after your surgery can help avoid this.
4. **Delirium (confusion):** This is very common after any operation and can be caused by various things, such as pain-relieving medications, pain itself, infection, constipation or anaesthetic agents. Often no particular cause is found. People with delirium can become confused, quiet and withdrawn or aggressive and agitated. They can be very sleepy or awake all night. Sometimes people with delirium don't recognise close friends and family and can act very out of character.

There is no specific treatment for delirium and it will pass after a few days at most. We will help this by monitoring you closely, re-orientating you regularly and ensuring pain, constipation and infection are treated quickly.

Delirium can be a frightening experience, so we will also try our best to make sure that you feel safe as it can be a frightening experience at the time. We will ask your family to ensure you have any hearing aids, spectacles or other necessary equipment with you – not having these can add to the confusion when in a strange environment. Having family members present may also help to reduce the duration of the delirium.

5. **Constipation:** This is common after hip fracture surgery, and is caused by a combination of the fracture itself, prolonged bed-rest and some painkillers. We will prescribe laxatives and, if necessary, you may be offered an enema or suppository. Drinking lots of water can also help, so we will encourage you to do this.

There may be other risks specific to your individual case and specific operation – your surgeon, anaesthetist or nurse will discuss these with you.

If you have any further questions about risks, talk to your surgeon before your operation.

Are there any alternatives?

You can opt not to have the operation, but this will mean that you will be left disabled in the long-term and in pain. You will also have a greater risk of the complications associated with reduced mobility (see 1– 5 above). Your doctor will discuss this further with you.

How can I prepare for surgery?

You will be on bed rest in hospital before the operation. The bed will have a pressure mattress on it and you will need to wear heel protectors (large inflatable boots) to reduce your risk of developing pressure sores.

You will also need to fast before your surgery. **Fasting means that you cannot eat anything for six hours before surgery, but you can drink water only, up until two hours before your operation.** If you are taking medicines, you should continue to take them as usual, with a sip of water up to two hours before your operation unless your anaesthetist or surgeon has asked you not to.

We will give you clear instructions on when to start fasting. It is important that you follow these instructions. If there is food or liquid in your stomach during the anaesthetic, it could come back up your throat and damage your lungs.

Unfortunately, it is difficult to give you an exact time for your operation as all emergency surgery is prioritised according to clinical need. If you have any underlying medical condition, you may need treatment to improve this before surgery.

Giving my consent (permission)

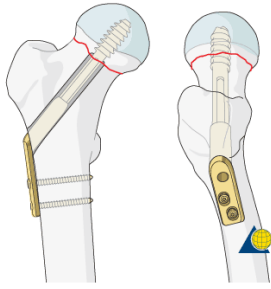
We want to involve you in all the decisions about your care and treatment. If you decide to go ahead with the operation, you will be asked to sign a consent form. The consent form confirms that you agree to have the procedure and that you understand the benefits, risks and alternatives. If there is anything that you do not understand or if you need more time to think about it, please tell the staff caring for you. You can change your mind at any time, even if you have signed the consent form. Let staff know immediately if you change your mind.

Will I be awake during the operation?

The operation may be performed under general anaesthetic, which will mean that you are asleep), or regional anaesthetic (for example, spinal or epidural) where your legs will be numb but you may be awake. The anaesthetist will talk to you beforehand about which type of anaesthetic is the most appropriate for you and which you would prefer. There is also a leaflet called **Having an anaesthetic**, which gives further information on this. Please ask ward staff if you would like a copy.

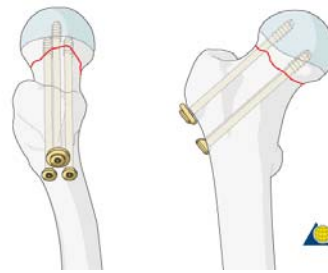
What happens during an internal fixation operation?

A cut will be made at the top of your thigh. Your fracture will be fixed by placing a sliding hip screw (also called a dynamic hip screw) into the head of the femur (thigh bone), secured to the top of the femur. This will hold the fracture together. If you are having cannulated screws, a number of smaller screws are used instead.



Dynamic Hip Screw front and side views

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Cannulated Hip Screws front and side views

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Your surgery will last approximately one hour. However, anaesthetic and recovery time means you will be away from the ward for about four hours.

Will I feel any pain?

The level of pain experienced after surgery varies between patients. Before your surgery, the anaesthetist will talk with you about pain control. If you have any questions or concerns, please do not hesitate to ask the anaesthetist or a nurse.

If at any time you experience pain or are concerned, please speak to one of the nurses about your pain relief medicine. It takes about 20–30 minutes for painkillers to start working, but they can take up to one hour to have their full effect. You may have to take additional painkillers 20–30 minutes before your therapy sessions so that the pain doesn't limit your rehabilitation. Your therapist will discuss this with you.

What happens after the operation?

You will wake up in the recovery room. You will have a large dressing on your hip to protect the wound. If you feel a bit sick or disorientated, this is normal. When the recovery staff are happy that your condition is stable and any pain is controlled, you will return to the ward.

The ward nurses will continue to monitor your blood pressure, pulse and temperature as well as checking your wound. They will do this less often as your condition stabilises. You may have a drip attached to you to hydrate you, a face mask giving you oxygen and a catheter (tube in your bladder) to help you pass urine.

Once you are back on the ward, you can eat and drink as soon as you feel ready. You will be given regular pain relief by the nurses and you can ask for more if you feel you need it.

The day after your surgery

After breakfast, the nurses will help you to have a wash. The doctor will review you and may need to take a blood sample.

You may have some oozing from your wound – the nurses will usually apply extra padding if this happens rather than changing the whole dressing. This is to prevent exposing the wound to the risk of infection. The dressing is usually removed, the wound assessed and the dressing reapplied after 48 hours.

Medical assessment

You will be assessed either before or after your surgery by physicians with a special interest in the care of hip fracture patients. They will also review you a few times during your stay to monitor your recovery.

They may recommend that you have a bone density scan (DXA) at a later date. They may also give you medicines for osteoporosis (weak and fragile bones). These can include vitamin D and calcium supplements, and a once-weekly osteoporosis drug called a bisphosphonate. This is because osteoporosis is common in people who have broken their hip and it is recommended that all patients who sustain this injury should be screened and/or treated for osteoporosis. This treatment will be discussed during your review. There are also leaflets about osteoporosis available on the ward – please ask us if you would like one.

Sometimes, it may be necessary to have further tests to investigate why you fell, with the aim of reducing the chance of future falls. The physician may therefore arrange follow-up appointments in an outpatient clinic, or recommend that your GP arranges this if you are not from the area local to this hospital. All of this will be discussed with you during their review.

Rehabilitation after hip surgery

After your surgery you will be seen by both physiotherapists and occupational therapists (OTs). The physiotherapists will help you to start moving and the OTs will work with you to plan how you will manage at home after your operation. However, it is up to you to take responsibility for your rehabilitation.

What can I do after surgery?

On the day of your surgery, and the first day after your surgery:

The therapists will work with you to get moving. If you have had your operation in the morning, they will see you that afternoon and practice sitting you on the edge of the bed and standing. Most people stand up, walk with a frame and sit out in a chair on the first day. You should be sitting out of bed for all meals from this point onwards.

From the second day onwards:

The therapists will assess your progress daily and set goals with you for your ongoing rehabilitation. Remember, your goals will vary depending on what you were able to do before your operation.

Common activities:

- Walking on the ward (with a frame/crutches to avoid putting weight on the fractured side).
- Getting from your bed to the chair or toilet independently.
- Using the bathroom facilities.
- Climbing a few steps or stairs.
- Washing and dressing yourself.

What can I do to speed up my recovery?

- **Take your pain medication.** It is very important that your pain is well controlled so that you can actively participate in therapy. Always consider what your pain will be like when you are moving, not just when you are lying still. If you feel the pain will affect your ability to move, you must let your nurse know so that they can give you additional pain medication.
- **Clothing and Footwear.** Please ask your family/friends to bring in supportive slippers or flat shoes, day clothes, toiletries and any hearing aids or spectacles that you normally use. This will help you get back to normal more quickly.
- **Furniture heights.** Please ask your family/friends to measure your furniture (see form attached). This helps us to know what heights you need to practice from on the ward.

Usually, on the first day after your operation, the physiotherapists will help you to get out of bed and get in to a chair with the help of a walking frame or crutches. If you feel able, the physiotherapist will help you to begin walking practice. The physiotherapist will tell you how much weight you can safely take through the operated leg when walking. In addition to your therapy, you will be provided with suitable exercises to do on your own and a handout demonstrating these. These exercises will help you to recover more quickly and will also help to prevent against complications such as blood clots, pressure sores and chest infections.

When can I leave hospital?

We begin planning your discharge (going home date) as soon as you are admitted to hospital. We want you to recover as quickly as possible, and will do all we can to assist you with this. Many people leave hospital within five days or less of their operation, however, this will depend on your individual needs. Therapists will discuss ongoing rehabilitation plans with you and your expected discharge date will be discussed with you a day or two after your surgery. If you have any concerns about going home, please let your therapist know.

On discharge from hospital, you will be provided with:

- **Medicines:** You will usually be supplied with enough medication to last at least 14 days. It is essential that you obtain a renewed supply of these from your GP before your hospital supply runs out. It is likely that these will contain medicines for bone health and osteoporosis, which will need to be taken in the long term to help to reduce your risk of future fractures. Ask a member of staff if you have any questions about your medication or call the Pharmacy Medicines Helpline number, given at the end of this leaflet.
- **Transport home:** If a relative or friend is not able to take you home, please speak to the nursing staff who can arrange hospital transport to take you home if required.
- **Discharge letter:** Your GP will be sent a discharge letter containing details about your hospital stay and the medications you are on. You will also be given a copy of this letter when you leave the hospital.

After I leave hospital

You may need some help and support when you leave hospital. We want to make sure that all the services you need are in place before you go home. You may need the help of Social Services or further rehabilitation by another care provider. It is important that any help is organised early on. The nurses/doctors/OTs and physiotherapists will all help to arrange further support if needed.

Continuing your rehabilitation after your hospital stay

Your road to recovery will not end when you are discharged from hospital. When you leave the hospital, you will most likely be walking with a frame or elbow crutches, and you may require some help with your daily activities such as washing, dressing and meal preparation. Your therapists will discuss ongoing rehabilitation plans with you before you go home. Full recovery may take many months but the quickest part of your recovery will be in the first six to twelve weeks after your operation.

Looking after your wound

By the time you go home from hospital your wound may have healed and been left exposed. If you still have a dressing over your wound, you will be referred to either a district nurse or your practice nurse to review this. Your sutures (stitches) may be dissolvable, in which case they do not need to be removed. If they are not dissolvable (metal clips, for example), they will need to be removed and this usually happens 10–12 days after your surgery. Your nurse or surgeon will tell you of when they need to be removed before you go home. You may be referred to either your practice nurse or the district nurse for this.

Will I be in pain?

It is important that you take your prescribed painkillers regularly to keep you as comfortable as possible. However, they are not compulsory and if you have little to no pain, you may not need to take them. If you have any questions about your medicines, contact our Pharmacy Medicines Helpline on the number given at the end of this leaflet.

If your pain does not settle, you can either be reviewed at your outpatient appointment or contact your GP for advice.

Will I need to do any specific exercises?

Before you go home your therapists may prescribe exercises for you to do at home and will give you a separate sheet of paper showing your individual rehabilitation plan. If you have any concerns or questions about this, please discuss them with the therapist.

The therapists may also refer you for ongoing physiotherapy at home with the supported discharge team, or to outpatient hospital-based physiotherapy. If you are referred to have outpatient physiotherapy and do not get an appointment within one month please contact your GP, who will speak to them on your behalf.

When can I return to normal activities?

Meal preparation and household chores

Depending on how you progress with your rehabilitation, you may need additional help with usual domestic activities for a while. Occupational therapists will discuss this with you before you leave hospital.

Driving

Please discuss with your doctor or physiotherapist when it is advisable to start driving again. The Drivers Vehicle Licensing Agency (DVLA) regards it as your responsibility to judge when you can safely control a car. You should contact your doctor or the DVLA if you are concerned about this. You may also need to tell your motor insurance company about your current state

of health and what medication you are taking. Each insurance company is different. It is best to discuss your circumstances with your insurance company to be sure that you are covered.

Returning to work

Depending on the type of job that you do, you may need time off from work. This time varies from person to person and depends on the operation you have had. You may feel quite tired at first and we would suggest that you talk to your employer about returning to work gradually. You may also need to think about how you travel to work, as this may be difficult. The OTs and nursing staff on the ward or in the clinic can advise you about this. Alternatively, you can ask your GP or surgeon.

Certificates

If you need a medical certificate or an insurance form completed, please tell the nurse looking after you before you are discharged.

What should I do if I have a problem?

Once you are at home, you should watch out for:

- **Swollen lower leg or ankle.** This is common for the first few months after the operation. To help, you should try to ensure that your leg is raised higher than your heart when sitting or lying down. You can do this by propping it up on some pillows (if you are lying down) or on a foot stool (if you are sitting).
- **Sudden swelling of the whole leg.** If your leg becomes swollen, red, hot, painful or inflamed and you are suddenly unable to walk on your operated leg, call your GP as soon as possible. If your GP surgery is closed, go to your nearest nearest Accident and Emergency (A&E) department.

Please see your GP as soon as possible:

- if your wound begins to seep or becomes red, hot or inflamed
- if your pain seems to be getting worse
- if you have a fever (temperature higher than 37.5°C).

Important: If you experience sudden shortness of breath, contact your GP urgently or go to your local Accident and Emergency (A&E) department.

Will I have a follow-up appointment?

You will need regular follow-up appointments in the fracture clinic to check how your bone is healing and to receive instruction on when you will be allowed to put your full weight on the fractured side of your body. The doctors who review you before your discharge from hospital will inform you when to expect the first appointment date.

If you need a scan to check for osteoporosis or to assess your risk of falling again, you may be followed up in the falls and bone health clinic. This is so that we can try to reduce your risk of having any future fractures.

You will be told if you require any further appointments before you are discharged, and the details will be posted to you. If you have been told you will be followed up but do not hear anything within six to eight weeks, please contact your GP who can look into the matter for you.

All patients who have had a hip fracture will receive a telephone call after four months, and again after one year. This is to check on your progress since discharge, and assist with any questions you may have at that stage.

The progress of all hip fracture patients is monitored via the National Hip Fracture Database (NHFD) which has been set up to improve the care of patients who sustain a hip fracture in the UK. NHFD reports show how different hospitals compare, which has helped to improve standards of care nationally. All information is anonymous and strictly confidential. If you would prefer for your details not to be included on the NHFD, please let a member of staff know.

Contact us

If you have any questions or concerns about your dynamic hip screw operation, please contact George Perkins Ward on **020 7188 2670** or Alan Apley Ward on **020 7188 0561** (Monday to Friday, 9am to 5pm), and ask to speak to the nurse in charge.

Further information

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas'

t: 020 7188 8803 at Guy's

e: pals@gstt.nhs.uk

Language support services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS Direct

Offers health information and advice from specially trained nurses over the phone 24 hours a day.

t: 0845 4647 **w:** www.nhsdirect.nhs.uk

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

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