PROCEDURE

Hip fracture surgery

Hip fracture surgery repairs a broken upper thigh bone or replaces the damaged hip joint

PURPOSE
Stabilise the fracture, relieve pain, and restore movement

PROCEDURE TYPE
Therapeutic surgery using fixation or joint replacement

WHERE IT IS DONE
Operating theatre

ANAESTHESIA
Spinal or general anaesthesia, often with additional pain relief

HOW LONG IT TAKES
About one to three hours

PREPARATION
Fasting, medication review, blood thinner plan, preoperative tests

RECOVERY
Several hospital days; no driving until medically cleared

MAIN RISKS
Infection, bleeding, blood clots, repair or implant failure

RESULTS
Repair confirmed immediately; healing checked over weeks to months

Overview

Hip fracture surgery treats a break near the top of the thigh bone, where it meets the pelvis. Most people need surgery because stabilising or replacing the broken bone reduces pain and makes it possible to start moving again.

The operation used depends on the fracture's location and stability, the condition of the hip joint, and your health and mobility before the injury. Options include holding the bone together with screws, a plate or a metal rod, or replacing part or all of the hip joint.

Surgery is usually performed soon after admission, once urgent medical problems have been assessed and treated.[1,2]

Why the procedure is performed

A hip fracture usually makes standing and walking difficult or impossible. Without stable treatment, movement can remain very painful.

Surgery aims to:

The operation cannot guarantee a return to your previous strength or independence. Recovery is also affected by your general health, muscle strength and mobility before the fracture.

- Hold the broken bone in a stable position
- Reduce pain during movement
- Allow earlier sitting, standing and walking
- Improve the chance of returning to everyday activities
- Reduce problems linked to staying in bed, such as blood clots and chest infections

Who should and should not have it

Most people with a hip fracture are offered surgery. This includes many older people with long-term health conditions, because prolonged bed rest may carry greater risks than an operation.

Surgery may be delayed briefly to treat a problem that makes anaesthesia or surgery less safe. Examples include severe dehydration, uncontrolled heart failure, a serious chest infection, major electrolyte disturbances or the effects of certain blood-thinning medicines. The team will balance the benefit of early surgery against the need to stabilise these problems.

Non-surgical care may be considered for a small number of stable fractures or when surgery would not match a person's goals of care. This may include someone who is nearing the end of life or has an illness that makes the burdens of surgery greater than the likely benefit. The decision should include the person, their family or representative when appropriate, and the clinical team.

How to prepare

Hip fracture surgery is often unplanned, so preparation usually takes place in hospital. The treating facility's own instructions take priority , including its rules about eating, drinking and medicines.

Tell the team about your medicines, allergies, previous reactions to anaesthesia, implanted

devices and other health conditions. Do not stop a blood thinner like warfarin or apixaban on your own. The team will decide whether it should be paused, reversed or continued.

You may have blood tests, an electrocardiogram to check heart rhythm, and chest or hip imaging. Staff will explain the proposed operation and ask for consent. If you cannot make the decision yourself, local consent laws and any known wishes or advance care plans will guide the process.

Pain relief may include tablets, medicine through a vein, or a nerve block that numbs the hip area.

What happens during the procedure

You will usually receive either spinal anaesthesia, which numbs the lower body, or general anaesthesia, which makes you unconscious. Sedation may be given with spinal anaesthesia so that you are relaxed or asleep.

The operation depends on the fracture:

The surgeon makes an incision over the hip or upper thigh. X-rays may be used during fixation to check the position of the bone and metalwork. The wound is then closed and covered with a dressing.

Most operations take about one to three hours, although complex fractures or additional medical needs may increase the time.

- Internal fixation: Screws, a plate or a metal rod hold the bone together while it heals
- Hemiarthroplasty: The broken head of the thigh bone is replaced with an artificial part
- Total hip replacement: Both the head of the thigh bone and the hip socket are replaced

Recovery and what to expect afterward

Pain is expected, especially when you first move. Regular pain relief should make breathing deeply, sleeping and taking part in physiotherapy more manageable. Tell staff if pain remains severe or suddenly worsens.

You can often drink and eat after the anaesthetic has worn off, provided you are alert and not feeling sick. Some people need help with fluids or nutrition during the first few days.

Staff usually help you sit, stand or walk soon after surgery, often by the following day.[1,2] A walking frame or crutches may be needed. Many people can put weight through the operated

leg, but some repairs require temporary limits. Follow the instructions given for your operation.

Blood-thinning medicine, compression devices and movement may be used to reduce blood-clot risk. Physiotherapy focuses on walking, strength and safe transfers. Occupational therapy may help plan equipment or support for home.

Do not drive until you can safely control the vehicle, perform an emergency stop and are no longer affected by sedating medicines. Your surgeon must clear you, and your insurer may have additional requirements.

Returning to work depends on the job and your recovery. Desk work may be possible sooner than work involving lifting, prolonged standing or driving.

Risks and possible complications

Hip fracture surgery is major surgery, and complications are possible. Your personal risk is influenced by your health, the fracture and the operation used.

Possible complications include:

Some people do not regain their previous walking ability. Your team can explain the risks most relevant to you and what is being done to reduce them.

- Bleeding, blood transfusion or a wound infection
- A blood clot in the leg or lungs
- Chest infection, urinary infection or pressure injury
- Delirium, meaning a sudden period of confusion
- Dislocation after joint replacement
- Failure of the fracture to heal, loss of fixation or implant loosening
- Reduced blood supply to the bone, sometimes requiring further surgery
- Injury to nearby nerves or blood vessels
- Heart, breathing or anaesthetic complications

Results and follow up

The surgeon can usually confirm immediately whether the fracture has been stabilised or the joint replaced as planned. Recovery of movement and strength takes weeks to months.

Before discharge, the team will review your walking, pain control, medicines and support

needs. You may go home with help or move temporarily to a rehabilitation facility.

Routine follow-up may include a wound check, removal of clips or stitches if needed, and X-rays to assess healing or implant position. Keep taking prescribed blood-clot prevention and follow weight-bearing instructions for the stated period.

Alternatives

The alternatives depend on the fracture and your goals.

Non-surgical treatment uses pain relief, careful positioning and help with movement. It avoids anaesthesia and an operation, but the fracture may remain painful or unstable. Prolonged immobility can make nursing care and recovery harder.

Temporary traction uses a pulling force to support the leg. It may ease discomfort while waiting for surgery, but it does not usually provide lasting treatment.

Different operations may also be alternatives. Fixation preserves your own hip but relies on the bone healing and may require another operation if it fails. Hemiarthroplasty avoids waiting for the broken femoral head to heal but replaces part of the joint. Total hip replacement may provide better function for selected people who were active and independent, but it is a larger operation and has a higher dislocation risk than hemiarthroplasty.[1,2]

When to call your healthcare team

Attend routine appointments even if recovery seems to be going well.

Contact your healthcare team promptly if you develop increasing wound redness, drainage, fever, worsening hip pain, new calf swelling, repeated falls or a sudden decline in walking ability.

Seek emergency help for sudden shortness of breath, chest pain, coughing up blood, collapse, or a leg that becomes suddenly shortened, twisted or impossible to move after a fall. New severe confusion also needs urgent assessment, especially if it develops suddenly.

Common questions

Will I be asleep?

You may have general anaesthesia and be fully unconscious. With spinal anaesthesia, your lower body is numb; sedation can make you relaxed or asleep. The anaesthetist will discuss the

safest option.

Can I drive home?

No. Hip fracture surgery requires a hospital stay, and you cannot drive while recovering from anaesthesia or while your hip movement and strength are limited.

How painful is it?

Pain is common but should improve after the fracture is stabilised. Medicine, positioning, ice when advised and sometimes a nerve block can help. Report pain that is uncontrolled or suddenly worse.

When will I walk again?

Many people begin assisted standing or walking by the next day. Your timing and weight-bearing limit are based on the operation, bone strength and general health.

When will I know whether it worked?

The surgeon knows immediately whether the repair or replacement was completed as planned. Follow-up examinations and X-rays show how healing and mobility are progressing.

Sources

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