

# HIP FRACTURES



## Understanding the surgical process

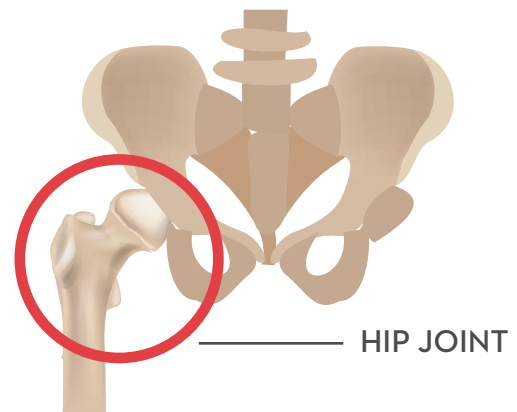
A hip fracture is a break at the top of the thigh bone or femur, near or within the hip joint. Hip fractures are usually caused by falls and occur most often in older adults with a bone disease called osteoporosis. Changes in the mineral content of the bone occur in osteoporosis, resulting in a weaker bone that is brittle and at greater risk for fracture. The type of treatment for a hip fracture depends on which part of the femur breaks and how it breaks. Symptoms of a hip fracture include shortening and/or twisting of the leg, inability to walk, swelling or bruising, and pain in the hip and/or groin.

## Hip fracture treatments

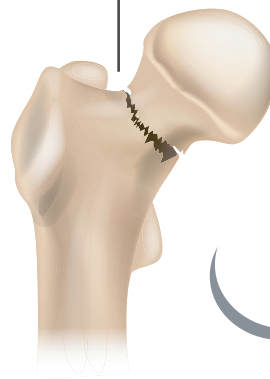
The surgeon will share treatment options that include surgical as well as nonsurgical treatments. In patients with an underlying serious illness that is in an advanced stage, such as cancer, palliative care may be considered. Hip fractures usually require surgery. The type of treatment will be based on the type of fracture and your overall condition.

Palliative care is highly specialized medical care focused on providing treatment of the whole body as well as supportive care to the patient and family.

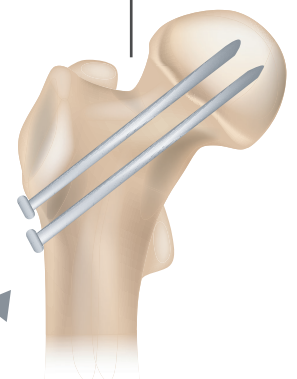
Surgical options offered depend on the type of hip fracture that you have. Surgery is usually performed within 36 hours of arrival and could include **hip fracture fixation**, which places screws, pins, rods or plates inside the body to fix the fracture, or **hip replacement surgery**, which is a partial or full replacement of the hip joint with manmade components.



FEMORAL NECK FRACTURE



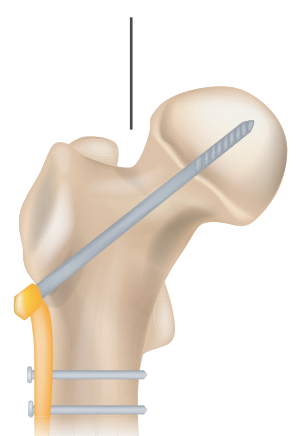
REPAIR



INTERTROCHANTERIC REGION FRACTURE



REPAIR



## Evaluating the benefits and potential risks

### What are the benefits of surgery?

The goals and benefits of surgery are to correct the bone position, promote healing, provide pain relief, and help to get you walking again. After surgery, you will be much more comfortable and able to participate in supportive activities with nursing and therapy staff.

### What factors can limit improvement from surgery?

- Smoking.
- Inadequate nutrition.
- Delayed mobilization after surgery.
- Failure to follow postoperative instructions.
- Uncontrolled conditions such as pain, diabetes, obesity, depression and dementia.

### What are the potential risks of surgery?

- Infection.
- A blood clot in the leg or lung.
- Pneumonia.
- Allergic reaction to medicine or anesthesia.
- Unrelieved joint pain or stiffness.
- Difficulty urinating. This is usually related to medication and resolves quickly.
- Bleeding.
- Difference in leg length.
- Injury to nearby nerves.
- Pressure wounds (bedsores).
- Constipation.
- Nausea/vomiting. This is usually related to medications and resolves quickly.
- Failure of the bone to heal.
- Loosening or wearing out of the fixation device used.
- Dislocation (with hip replacement surgery).
- **RARE:** A fat embolism (blockage) can occur if fat particles from the broken bone enter the bloodstream, which can raise the risk of a heart attack or stroke.

### What should you tell the care team about?

- Allergies.
- Medical conditions treated by a specialist such as a cardiologist, pulmonologist, etc.
- Vitamins, herbs, eye drops, creams, over-the-counter and prescribed medications that you take or use.
- Personal or family history of blood disorders, blood clots or bleeding problems.
- Prior surgeries and any complications with prior surgeries.
- Current or previous infections.
- Personal or family history of problems with anesthesia.

## Preparing for surgery

### We will evaluate your overall condition using:

- Diagnostic tests: An X-ray will be taken of your hip; however, additional radiology scans of your hip may be ordered if the surgeon feels further evaluation is needed prior to surgery. Depending on your medical history and the results of past tests, other tests ordered prior to surgery may include an electrocardiogram (EKG) to evaluate your heart; a chest X-Ray to evaluate your lungs; blood tests to check blood count; a test to see the time it takes for blood to clot; electrolytes, including liver and kidney function; and a urine test to check for infection.
- Medical assessment: Depending on your medical history and test results, additional physician specialists such as a heart doctor may be asked to help with your preparation for surgery.

Medications **may be held** prior to surgery.

Your medications will be reviewed by your care team and some medications may be held. This will vary based on your overall condition and needs.

- Anti-inflammatory medications and/or antiplatelet medications. These medications include aspirin, Plavix®, ibuprofen (Advil®, Motrin®), Celebrex®, naproxen (Aleve®), meloxicam (Mobic®), diclofenac and indocin, etc.
- Herbal supplements and certain vitamins can result in increased bleeding. These include St. John's wort, garlic, ginseng, ginkgo biloba, vitamin E, vitamin C, chondroitin, danshen, feverfew, fish oil, garlic tablets, ginger tablets, guilinggao and CoQ10.
- Oral hyperglycemic agents or diabetes medication and/or insulin products in patients with diabetes.
- Blood pressure medications (ACE/ARB). These medications include lisinopril, Lotrel®, captopril, Lotensin®, Monopril®, Prinzide®, Atacand, Benicar, Diovan® and Avalide, etc.
- Blood thinners or anticoagulants, including Coumadin, Eliquis®, Brilinta® or Xarelto® are stopped prior to surgery.

## Preparing in advance for recovery

While discharge home is the most desired, patients with extra care needs may require more days in the hospital or a short stay at a local rehabilitation facility. A case manager will assist you and your family with choosing a home health agency or a rehabilitation facility, if needed, to provide you with services after your discharge.

Discuss with your family or significant other your mode of transportation at the time of discharge. This will need to be a vehicle that sits low to the ground and has plenty of leg room. Equipment such as a walker may be provided when you are discharged home.

Discuss with your family or significant other arrangements for a caregiver at home. A caregiver is a family member or a friend who can be with you for the first few days after your discharge and helps prepare your home for your arrival by doing the following:

- Ensure walkways are free from clutter and tripping hazards, such as throw rugs and electrical cords.
- Arrange for pet care. Pets can be tripping/falling hazards.
- Ensure walkways are well lit, use nightlights.
- Place grab bars in showers and bathtubs.
- Place clean sheets on your bed.
- Plan nutritious meals.
- Purchase hand sanitizer, stool softeners and acetaminophen (Tylenol®).

## During your hospital stay

### What happens the day of your surgery?

Your anesthesiologist will assess you in the preoperative area and discuss the anesthesia plan. The length of the surgery will depend on the type of surgery required. The surgeon will provide this information prior to surgery. After surgery, you will be in the recovery room for about an hour before going to your hospital room.

### What to expect during your hospital stay

After surgery, nurses and physical and occupational therapists will begin assisting you with activities such as sitting up and walking short distances. While you are in the hospital, a gait belt will be applied any time that you are out of bed. It is a device that is used to help prevent falls and provide support for patients with mobility issues.



**Do not get up without the assistance of staff and a gait belt in place.**

Take deep breaths and cough every hour and use an incentive spirometer five to 10 times per hour while awake to help prevent pneumonia. Rely on oral pain medication and NOT intravenous (IV), as oral medication provides longer-acting pain relief.

Elevate the affected leg most of the day with the heel floating over the edge of the pillows. Avoid placing pillows directly under the heel of the foot as this can cause pressure ulcers or bed sores even with soft pillows. Repositioning in bed by turning over every two hours is necessary to prevent pressure ulcers to the skin that covers the coccyx area. Muscle spasms are common. Notify the nurse if spasms occur. Complete ankle pump exercises at least 10 times per hour while awake.

Patients usually require a hospital stay of three to five days, but this will be based on your medical needs. You must meet specific criteria in order to discharge home, including:

- Clearance by staff for safe walking. **Do not get up without staff assistance while in the hospital.**
- An approved, safe discharge plan.
- Deemed medically stable by your care team.
- Adequate pain control.
- Tolerate food and liquids.
- Able to urinate.

Having a bowel movement IS NOT a discharge requirement unless there is a related medical issue.

## Recovery and follow-up care

### When can you return to normal activities?

Your surgeon will help determine when you can resume normal activities such as work, driving and exercising. For a hip fracture, this may take six weeks to four months after surgery. The time of recovery depends on your condition prior to surgery, the type of fracture, the surgery required, as well as how much effort you put in to your exercise sessions.

The surgeon will provide you with verbal and written instructions on self-care during recovery. Discomfort is expected while you gradually return to normal activity; however, increased pain may be a warning sign to slow down. Pain medication is prescribed for home use.

### Pain medication is a narcotic and potentially addictive and must be taken as ordered.

- Do not mix pain medication with alcohol or other sedatives, as this can suppress breathing, cause dizziness and drowsiness, and increase your risk of falling.
- Do not share your pain medication with others.
- Pain medication causes constipation. Drink eight glasses of fluids per day, eat fruits and vegetables, and take over-the-counter stool softeners as needed.
- Wean off pain medication by alternating pain medication with Tylenol®. Many pain medications contain Tylenol. Do not exceed 3,000 milligrams of Tylenol per day.
- Return leftover medications to the pharmacy, or mix in kitty litter, seal in a plastic bag, and place in the trash.
- Request prescription refills during office hours 48 hours in advance of running out of the medication.

### Anticoagulants

Early mobility combined with an anticoagulant (blood thinner) helps prevent blood clots after surgery. The medication may be something as simple as an aspirin; however, the type of anticoagulant chosen is based on the individual needs of the patient. While taking the anticoagulant, you should avoid taking any additional aspirin, ibuprofen (Advil or Motrin), Aleve (naproxen), or other nonsteroidal anti-inflammatory medications. Notify the surgeon immediately if any blood is noted in your urine, stool, vomit, or from the nose or the incision. Blood in the stool often appears as black or maroon. Blood in urine may appear as pink. Blood

in vomit may appear as brown- or black-like coffee grounds. You will need to apply pressure for a longer time to any cuts/abrasions to stop bleeding. Avoid alcohol while taking anticoagulants.

### Stool softeners

You will be at greater risk of constipation after surgery due to being less mobile and on pain medication. Take stool softeners based on the package instructions while on pain medication. If stools become too loose or too frequent, decrease the dosage or stop the stool softener. If constipation occurs despite use of stool softeners, you can increase the dosage of the stool softeners as listed on the package and add a laxative of choice. Drink plenty of fluids and eat fruits and vegetables during your recovery time.

### Exercise

#### The following is information about exercise after surgery:

- Complete the exercise program as taught by the therapy staff multiple times per day.
- The exercise program will be advanced by the therapy staff as directed by your surgeon.
- During the day, walk every two hours while you are awake for short distances.
- Complete the ankle pump exercises at least 10 times per hour while awake.
- Elevate your legs when in bed and in a chair.
- Use cold packs for 20 minutes approximately five times per day. This should be done after completing your exercises and at any time you are experiencing pain/stiffness in your operative hip. Always put a towel between your skin and the cold pack.



### Restrictions and precautions while healing:

- Continue hip precautions, if ordered, as taught at the hospital.
- Your surgeon will discuss when you will be able to drive again.
- Weight bearing is as tolerated unless otherwise instructed.
- For the first week, stay inside on even terrain. You may go up and down stairs one at a time using the handrail once cleared by physical therapy.
- After one week, you may venture outside, if cleared to do so by physical therapist.
- Everyone who comes near you should wash their hands.
- No elective dental, genitourinary, colon or surgical procedures for 12 weeks after surgery unless absolutely necessary.
- Avoid sick people. If you must be around someone who is ill, they should wear a mask.
- Avoid visits to the emergency room or urgent care unless you are having a life-threatening event.
- No tub baths, hot tubs or swimming pools until approved by your surgeon.
- You may shower when directed by your surgeon.

### How do I care for my incision?

- Your surgeon will give specific instructions on when and how to change the dressing. Some dressings are made to leave on for several days or until your first office visit.
- Wash your hands prior to dressing changes.
- If the dressing becomes soiled or loosened, change the dressing using gauze and paper tape. Avoid touching the side of the gauze that goes against the incision.
- No creams or ointments on the incision.
- Do not touch or pick at the incision.
- Check dressing/incision every day and notify surgeon immediately if any of the following signs or symptoms are noted:
  - Increase in redness around the incision.
  - Increase in swelling around the incision or of the extremity.
  - Increase in pain.
  - Drainage oozing from the incision.
  - Pulling apart of the edges of the incision.
  - Increase in overall body temperature, >101.5 degrees.

### What should I expect during my follow-up office visits?

You will receive information about when to schedule a follow-up appointment with your surgeon upon discharge from the hospital. Additional X-rays of the hip prior to or at your follow-up visit may be ordered by your surgeon. If you have any concerns or suspected complications prior to your follow-up visit, call your surgeon's office. Do not wait until your appointment time if you suspect complications. These will need to be addressed in the office promptly. Evaluation of how you are doing will include checking your incision, pain level, functional status, and for symptoms of potential complications.

### Do not wait until your next follow-up appointment. Call your surgeon if any of the following symptoms occur:

- Pain not controlled with medication.
- Increased redness, swelling, drainage of any kind, and/or severe pain at surgery site.
- Red streaking on your extremity or near the surgical site.
- Rash or hives.
- Increased or new onset nausea and/or vomiting.
- Signs of a blood clot, such as severe calf pain, significant swelling and redness of the operative leg, and/or shortness of breath.
- Body temperature >101.5 degrees.
- Persistent bright red blood from the surgical site.
- Signs of decreased circulation to the ankle or foot, including coldness of the ankle and foot; paleness of the foot or leg; tingling and/or numbness after the block has fully resolved; sustained increase in pain that is uncontrolled by medication; or your toenail bed turns blue in color.

### If you have an emergency such as difficulty breathing, chest pain, passing out or hemorrhage, call 911 or go to your local emergency room.

#### References

1. Crowley, K. & Martin, K. (2023). Patient education: Hip fracture (the basics). Up To Date: Wolters Kluwer Health, 7 (82818). [https://www.uptodate.com/contents/hip-fracture-the-basics?search=hip%20fracture&topicRef=226&source=see\\_link#disclaimerContent](https://www.uptodate.com/contents/hip-fracture-the-basics?search=hip%20fracture&topicRef=226&source=see_link#disclaimerContent).

2. John Hopkins Medicine. (2023). Health: Treatment, tests, and therapies: Hip pinning. <https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/hip-pinning>.

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<https://www.saintlukeskc.org/health-library/pre-hip-replacement-ankle-pumps-quad-sets-leg-raises>.