

# HIP FRACTURE



## Description

A complete fracture of the hip, usually just below the ball of the hip or upper part of the femur (head and neck of the femur), is often caused by a fall or contact. A complete fracture is when the broken bone is completely separated. This fracture type may be displaced (the bones are not completely touching, if at all, or are angulated) or not displaced (the ends are in proper alignment and touching fully). These are infrequent in sports. They tend to occur in the senior athlete, although they may occur in athletes of any age.

## Common Signs and Symptoms

- Severe pain in the hip or groin, worse with movement of the hip and any attempt at standing on the injured extremity
- Tenderness, bleeding, bruising, and swelling at the hip
- Leg may appear shortened and the foot turned out
- Inability to stand
- Loss of pulse, numbness, tingling, or paralysis below the fracture site (rare)

## Causes

Injury causing a force greater than the bone can withstand; usually a direct blow, such as a fall onto the hip, or indirect stress to the hip joint

Indirect stress by twisting or violent muscle contraction

## Risk Increases With

- Adults greater than 60 years of age
- Contact sports and falls from heights
- Cycling
- Bony abnormalities (including osteoporosis), tumors of bone or bone marrow
- Poor balance
- Poor nutrition, including calcium and protein deficiency
- Poor physical conditioning (strength and flexibility)

## Preventive Measures

- Maintain appropriate conditioning:
  - Hip strength
  - Flexibility and endurance
  - Cardiovascular fitness and good balance skills
- Wear proper protective equipment (hip pads).
- Use proper technique.
- Maintain appropriate nutrition and calcium intake.

## Expected Outcome

This condition is usually curable with appropriate treatment and after care. The usual healing time for this fracture is 6 to 12 weeks. Healing is considered complete when there is no pain or motion at the fracture site and when radiographs (x-rays) show complete bone healing (union).

## Possible Complications

- Failure to heal (nonunion)
- Healing in poor position (malunion)
- Shock from blood loss
- Death of bone cells due to interruption of the blood supply to the hip
- Shortening or deformity of the fractured bone
- Arrest of bone growth in young people (before fully grown)
- Arthritic hip joint due to death of bone or repeated injury or from surgery
- Risks of surgery, including infection; bleeding; injury to nerves; excessive loss of blood; need for blood transfusion; injury to joint cartilage; pain from hardware (plates or screws); development of clots in the calf or thigh veins, which may break off and go to the lungs (pulmonary embolus); arthritis; hip dislocation; more surgery; and the complications listed earlier

## General Treatment Considerations

Treatment for hip fractures is to reduce the fracture (reposition the bones) and hold it in place with surgically placed screws or plates. Occasionally the fracture cannot be fixed with plates or screws and must be replaced with an artificial hip. Surgery allows for early mobilization (get out of bed and move the hip). Alternatively, bed rest with traction for 6 to 8 weeks or a body cast (only for fractures that are not displaced) for 6 to 8 weeks may be recommended. After this, treatment consists of the use of medications and ice to relieve pain. Crutches after surgery are usually recommended. Immobility of a bone for a long period or surgery can cause loss of muscle bulk, stiffness in nearby joints, and edema (accumulation

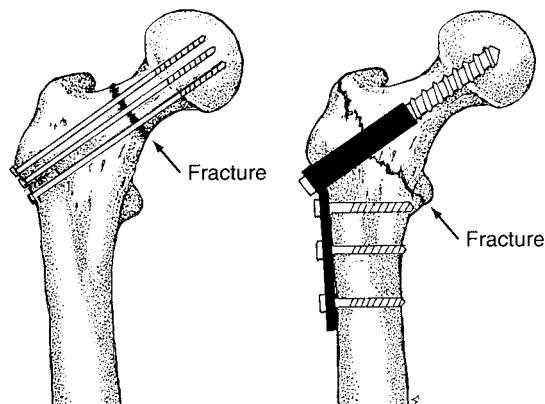


Figure 1

From Economou SG, Economou TS: Instructions for Surgery Patients. Philadelphia, WB Saunders, 1998, p. 325.

of fluid in tissues). Physical therapy may be necessary to regain motion after immobilization or surgery and to regain strength of the muscles around the joint.

### ■ ■ ■ Medication

- General anesthesia, sedation, or muscle relaxants may be necessary to make surgery possible. After this, medications such as acetaminophen may also be used to relieve mild to moderate pain.
- Narcotic pain relievers may be prescribed by your physician for severe pain. Use only as directed and only as much as you need.

### ■ ■ ■ Notify Our Office If

- The following occur after surgery (report any of these signs immediately):
  - Signs of infection, including fever, increased drainage, or redness from the hip wound
  - Swelling above or below the fracture site
  - Severe, persistent pain
  - Blue or gray skin below the fracture site, especially under the nails, or numbness or loss of feeling below the fracture site

Notes:

(Up to 4400 characters only)

Notes and suggestions