



DISEASES & CONDITIONS

Hip Dislocation

This article addresses hip dislocation that results from a traumatic injury. To learn about pediatric developmental hip dislocation, please read [Developmental Dislocation \(Dysplasia\) of the Hip \(DDH\) \(/en/diseases--conditions/developmental-dislocation-dysplasia-of-the-hip-ddh/\)](#). To learn about dislocation after total hip replacement, please read [Total Hip Replacement \(/en/treatment/total-hip-replacement/\)](#).

A traumatic hip dislocation occurs when the head of the thighbone (femur) is forced out of its socket in the hip bone (pelvis). It typically takes a major force to dislocate the hip. Car accidents and falls from significant heights are common causes and, as a result, other injuries like broken bones often occur with the dislocation.

A hip dislocation is a serious medical emergency. Immediate treatment is necessary.

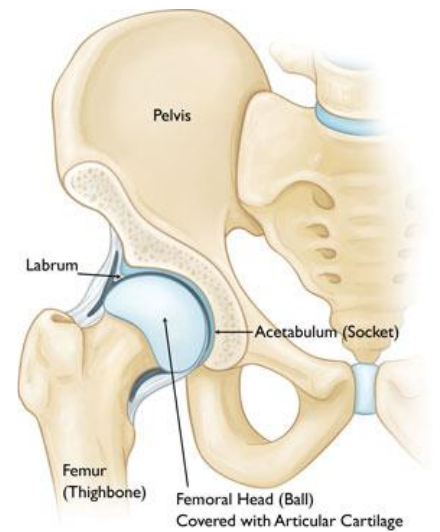
Anatomy

The hip is a ball-and-socket joint. The socket is formed by the acetabulum, which is part of the large pelvis bone. The ball is the femoral head, which is the upper end of the femur.

A smooth tissue called articular cartilage covers the surface of the ball and the socket. It creates a low friction surface that helps the bones glide easily across each other.

The acetabulum is ringed by strong fibrocartilage called the labrum. The labrum forms a gasket around the socket, creating a tight seal and helping to provide stability to the joint. Strong bands of tissue called ligaments provide additional stability to the hip joint.

In a healthy hip, the head of the femur stays firmly within the acetabulum.



Description

When there is a hip dislocation, the femoral head is pushed either backward out of the socket, or forward.

- **Posterior dislocation.** In approximately 90% of hip dislocation patients, the femur is pushed out of the socket in a backward direction. This is called a posterior dislocation. A posterior dislocation leaves the lower leg in a fixed position, with the knee and foot rotated in toward the middle of the body.
- **Anterior dislocation.** When the femur slips out of its socket in a forward direction, the hip will be bent only slightly, and the knee and foot will rotate out and away from the middle of the body.

When the hip dislocates, the ligaments, labrum, muscles, and other soft tissues holding the bones in place are often damaged, as well. The nerves around the hip may also be injured.

Cause

Motor vehicle collisions are the most common cause of traumatic hip dislocations. The dislocation often occurs when the knee hits the dashboard in a collision. This force drives the thigh backwards, which drives the ball head of the femur out of the hip socket. Wearing a seatbelt can greatly reduce your risk of hip dislocation during a collision.

A fall from a significant height (such as from a ladder) or an industrial accident can also generate enough force to dislocate a hip.

While far less common, hip dislocations can result from a collision while playing a sport, like football or hockey.

With hip dislocations, there are often other related injuries, such as fractures in the pelvis and legs; and back, abdominal, knee, and head injuries. Perhaps the most common fracture occurs when the head of the femur hits and breaks off the back part of the hip socket during the injury. This is called a posterior wall acetabular fracture-dislocation.

Symptoms

A hip dislocation is very painful. Patients are unable to move the leg, and, if there is nerve damage, they may not have any feeling in the foot or ankle area.

Doctor Examination

A hip dislocation is a medical emergency. Call for help immediately. Do not try to move the injured person, and keep them warm with blankets.

When hip dislocation is the only injury, an orthopaedic surgeon can often diagnose it simply by looking at the position of the leg. Because hip dislocations often occur with additional injuries, however, your doctor will complete a thorough physical evaluation.

Your doctor will order imaging tests, such as X-rays and likely a CT scan, to show the exact position of the dislocated bones, as well as any additional fractures in the hip or femur.

Treatment

Reduction Procedures

If there are no other injuries, you will receive an anesthetic or a sedative, and an orthopaedic doctor will manipulate the bones back into their proper position. This is called a reduction.

In some cases, the reduction must be done in the operating room with anesthesia. In rare cases, torn soft tissues or small bony fragments block the femur from going back into the socket. When this occurs, surgery is required to remove the loose tissues and correctly position the bones.

Following reduction, the surgeon will request another set of X-rays, and possibly a computed tomography (CT) scan, to make sure the bones are in the proper position.



(Left) This X-ray, taken from the front, shows a patient with a posterior dislocation of the left hip.

(Right) Normal alignment after the hip has been reduced.

Nonsurgical Treatment

If the hip joint is successfully reduced and there is no associated fracture of the femoral head (ball) or acetabulum (socket), nonsurgical treatment may be appropriate. In this case, you will likely not be able to put weight through your leg for 6 to 10 weeks and will be advised to avoid putting your injured leg in certain positions as you heal.

Surgical Treatment

Surgical treatment may be required if there are fractures associated with the dislocation, or if the hip is unstable even after reduction.

The goals of surgery are to restore hip joint stability and to restore the cartilage surfaces to their normal positions. Typically, this requires a large incision, and the surgery may result in a lot of blood loss. Patients may require a blood transfusion during or after this surgery.

Complications

A hip dislocation can have long-term consequences, particularly if there are associated fractures.

- **Nerve injury.** As the femur is pushed out of the socket, particularly in posterior dislocations, it can crush and stretch nerves in the hip. The sciatic nerve, which extends from the lower back down the back of the legs, is the nerve most commonly affected. Injury to the sciatic nerve may cause weakness in the lower leg and affect the ability to move the knee, ankle and foot normally. Sciatic nerve injury occurs in approximately 10% of hip dislocation patients. The majority of these patients will experience some nerve recovery.

- **Osteonecrosis.** As the femur is pushed out of the socket, it can tear blood vessels. When blood supply to the bone is lost, the bone can die, resulting in [osteonecrosis \(/en/diseases--conditions/osteonecrosis-of-the-hip/\)](/en/diseases--conditions/osteonecrosis-of-the-hip/) (also called avascular necrosis). This is a painful condition that can ultimately lead to the destruction of the hip joint, and arthritis.
- **Arthritis.** The protective cartilage covering the bone may also be damaged, which increases the risk of developing [arthritis \(/en/diseases--conditions/osteoarthritis-of-the-hip/\)](/en/diseases--conditions/osteoarthritis-of-the-hip/) in the joint. Arthritis can eventually lead to the need for other procedures, like a [total hip replacement \(/en/treatment/total-hip-replacement/\)](/en/treatment/total-hip-replacement/).

Recovery

It takes time – sometimes 2 to 3 months – for the hip to heal after a dislocation. The rehabilitation time may be longer if there are additional fractures. The doctor may recommend limiting hip motion for several weeks to protect the hip from dislocating again. Physical therapy is often recommended during recovery.

Patients often begin walking with crutches within a short time. Walking aids, such as walkers, crutches, and, eventually, canes, help patients regain their mobility.

Last Reviewed

October 2021

Contributed and/or Updated by

[Jared R.H. Foran, MD](#)

Peer-Reviewed by

[Thomas Ward Throckmorton, MD, FAAOS](#)

AAOS does not endorse any treatments, procedures, products, or physicians referenced herein. This information is provided as an educational service and is not intended to serve as medical advice. Anyone seeking specific orthopaedic advice or assistance should consult his or her orthopaedic surgeon, or locate one in your area through the AAOS [Find an Orthopaedist](#) program on this website.