

Acetabular Fractures After a Car Accident and How They're Treated

A Broken Hip Socket Can Require Complex Surgery, Months of Limited Weight Bearing, and Long-Term Joint Care

A car crash can break the hip in more than one place, and the exact location changes almost everything about treatment. An acetabular fracture isn't a break in the upper femur. It's a fracture of the socket in the pelvis that holds the head of the femur and forms the ball-and-socket hip joint.

That distinction matters because the acetabulum is also a weight-bearing joint surface. A fracture can disrupt the smooth cartilage inside the socket, push bone fragments out of alignment, destabilize the femoral head, or occur with a hip dislocation. Even when the bone heals, damage to the joint surface can create stiffness, chronic pain, or arthritis years later.

Our [Georgia car accident lawyers](#) know why these injuries can be difficult to value early. The emergency treatment may focus on stabilizing the fracture, but the medical future can depend on whether the joint remains congruent, whether surgery restores the socket, and whether the injured person later develops arthritis or needs a hip replacement.

An Acetabular Fracture Is Different From the Typical Broken Hip

The hip joint has two major bony components. The femoral head is the ball at the top of the thighbone. The acetabulum is the cup-shaped socket formed by the pelvis. A typical "hip fracture" often refers to a fracture of the femoral neck or another part of the upper femur. An acetabular fracture is on the socket side of the joint.

That makes it related to, but distinct from, other [broken hip injuries](#) and broader [pelvic fractures](#). The location matters because surgeons aren't only trying to get broken bone to heal. They're also trying to preserve the shape and alignment of the joint surface where the femoral head moves inside the socket.

According to the [American Academy of Orthopaedic Surgeons](#), most acetabular fractures result from high-energy trauma such as motor vehicle collisions. The fracture can involve the front or back wall of the socket, the anterior or posterior column, a transverse line through the acetabulum, both columns, or a combination of patterns.

How a Car Wreck Can Drive the Femoral Head Into the Socket

One classic mechanism happens when the knee strikes the dashboard in a frontal collision. The force travels up the femur and drives the femoral head into the acetabulum. Depending on the direction and magnitude of that force, the socket can fracture and the hip can dislocate.

A side impact can create a different loading pattern by driving force directly through the hip and pelvis. Higher-energy crashes can also produce injuries elsewhere in the body, including abdominal, chest, head, knee, or lower-extremity trauma, so the acetabular fracture may be only one part of the emergency evaluation.

The same crash can damage the cartilage or labrum even when those structures aren't the headline diagnosis. Persistent catching, deep groin pain, or limited motion after fracture healing may require evaluation for other intra-articular problems, including a [hip labral injury](#).

X-Rays Show the Break, but CT Often Maps the Fracture for Treatment

Acetabular fractures are three-dimensional injuries in a complex part of the pelvis. Standard X-rays can show the fracture pattern and displacement, but CT is commonly used to define the fragments and joint surface in greater detail.

That extra detail can affect the treatment plan. CT can show whether the weight-bearing dome is involved, whether fragments are pushed into the joint, how much displacement exists, whether the femoral head remains centered, and where the surgeon may need to approach the fracture.

This is one reason [medical imaging after a car accident](#) has to be read in context. A radiology report that simply says "acetabular fracture" doesn't tell the whole story. The pattern, displacement, cartilage involvement, hip stability, and associated injuries can all matter to prognosis and treatment.

Treatment Usually Turns on Five Medical Decisions

- 1. Is the Hip Joint Stable and Congruent:** Doctors first need to know whether the femoral head is sitting properly in the socket and whether the fracture leaves a stable, reasonably aligned joint. A dislocated hip or grossly unstable fracture can require urgent treatment before definitive reconstruction.
- 2. How Much Is the Fracture Displaced:** Small, stable fractures with acceptable alignment may sometimes be treated without surgery. Greater displacement, instability, involvement of the weight-bearing surface, or loose fragments in the joint can push the treatment plan toward fixation.
- 3. Can the Native Joint Surface Be Reconstructed:** For many displaced fractures, surgeons try to restore the acetabulum with open reduction and internal fixation, or ORIF. The goal is to realign the joint surface and hold the bone with plates and screws while it heals.
- 4. Would Hip Replacement Provide a Better Long-Term Result:** Some fractures are so comminuted or cartilage-damaging that reconstruction alone may have a poor chance

of preserving a functional hip, particularly in selected older patients. In those cases, the surgeon may consider total hip replacement, sometimes together with fracture fixation.

- 5. How Will the Patient Be Protected While the Bone Heals:** Weight-bearing restrictions, walking aids, blood-clot prevention, pain control, and physical therapy all become part of the plan. The fracture can be surgically repaired and still require months of protected activity before the hip is ready for normal loading.

Some Stable Fractures Can Be Treated Without Surgery

Not every acetabular fracture needs an operation. Nonsurgical treatment may be appropriate when the fracture is stable, the femoral head remains centered, the joint surface is acceptably aligned, and the patient can be monitored closely. Medical conditions or surgical risk can also influence the decision.

Nonsurgical care doesn't mean the injury is minor. The person may still need crutches or a walker, strict limits on weight bearing, medication, blood-clot prevention, repeat imaging, and physical therapy. AAOS notes that some patients may need to avoid full weight bearing for up to three months while the fracture heals.

Follow-up matters because an initially acceptable fracture can shift. If the joint loses alignment, the femoral head becomes unstable, or pain and imaging show the socket isn't healing in a usable position, the treatment plan can change.

ORIF Rebuilds the Socket With Plates and Screws

Open reduction and internal fixation is the standard surgical approach for many displaced acetabular fractures. "Open reduction" means the surgeon exposes the fracture and puts the fragments back into alignment. "Internal fixation" means plates and screws are used to hold that reconstruction while the bone heals.

The incision and surgical approach depend on where the fracture is located. Some fractures are reached from the front of the pelvis, others from the back, and complex patterns may require more than one approach. The operation can be technically demanding because the surgeon is rebuilding a deep joint surface close to major nerves and blood vessels.

The objective isn't simply to make the X-ray look better. The quality of the reduction matters because a step or gap in the articular surface can change how the femoral head loads the socket. That altered contact can accelerate cartilage wear and contribute to [post-traumatic arthritis](#) later.

Skeletal Traction May Be Temporary Rather Than the Final Treatment

Some patients are placed in skeletal traction while they wait for definitive surgery. A pin is temporarily placed through the femur or tibia and connected to weights that help hold the leg and fracture in a more controlled position.

Traction can reduce motion and pain and may help protect the damaged socket before reconstruction, but it usually isn't the final treatment for a displaced fracture that requires surgery. The timing of ORIF can depend on the patient's overall condition, swelling, associated injuries, operating-room logistics, and the fracture itself.

A Total Hip Replacement May Be Used When Reconstruction Isn't Enough

Some acetabular fractures destroy the joint surface so extensively that putting the pieces back together may not provide a durable hip. A total hip replacement replaces the damaged socket and femoral head with prosthetic components.

That option becomes particularly important in selected older patients with poor bone quality, severe comminution, femoral-head injury, pre-existing arthritis, or impaction of the weight-bearing surface. A [systematic review of acute hip replacement](#) in older acetabular-fracture patients identified dome impaction, irreducible articular comminution, femoral-head injury, and pre-existing osteoarthritis or avascular necrosis among commonly reported indications.

The exact strategy varies. Some patients undergo fracture fixation and hip replacement during the same treatment episode. Others first have the acetabulum repaired and only later undergo replacement if arthritis or joint failure develops. [Contemporary geriatric acetabular-fracture literature](#) emphasizes that these decisions have to be individualized around fracture pattern, bone quality, health, and functional goals.

Picture a High-Energy Crash With a Dashboard Impact

Picture a driver whose knee slams into the dashboard during a head-on collision. The force drives the femoral head backward into the socket, fracturing the posterior wall of the acetabulum and dislocating the hip.

At the hospital, the dislocation is addressed urgently and CT shows that part of the socket is displaced. The orthopedic trauma surgeon recommends ORIF. Plates and screws are used to rebuild the posterior wall, but the patient still leaves the hospital with strict weight-bearing limits and a walker.

Three months later, the bone is healing, but the driver still has weakness, limited hip motion, and difficulty climbing stairs. Physical therapy continues. At one year, the person has improved but still can't tolerate a full shift in a job that requires prolonged standing. That timeline is very

different from a simple fracture that heals in a cast and is one reason the medical future has to be understood before the injury claim is evaluated.

Recovery Is Often Measured in Months, Not Weeks

AAOS reports that acetabular fractures can take roughly 9 to 12 months to heal completely. Many patients use crutches, a walker, or another assistive device during the early phase and have limits on how much weight they can put through the injured leg.

Physical therapy often begins before full weight bearing returns. Early rehabilitation may focus on safe transfers, maintaining movement within restrictions, and preventing deconditioning. Later therapy can address hip strength, gait, balance, endurance, and the ability to return to work or recreation.

A return to strenuous activity can take even longer. AAOS notes that return to vigorous sports may take 6 to 18 months, and some patients never return to their pre-injury level. The outcome depends on the fracture pattern, cartilage damage, quality of reduction, age, bone quality, other injuries, and complications.

Complications Can Change the Medical Future After the Bone Heals

A successful operation doesn't eliminate every long-term risk. Acetabular fractures involve a joint surface and are close to major nerves, which creates several possible complications:

- **Post-Traumatic Arthritis:** Cartilage damage or an imperfect joint surface can lead to progressive pain and stiffness months or years later. Severe arthritis may eventually lead to hip replacement.
- **Sciatic Nerve Injury:** The sciatic nerve runs close to the back of the hip socket and can be injured in the crash or during treatment. Symptoms may include weakness, numbness, [nerve pain](#), or foot drop.
- **Blood Clots:** Limited mobility after a major pelvic or hip injury increases the risk of deep vein thrombosis. Doctors may prescribe anticoagulant medication and encourage safe movement within the patient's restrictions.
- **Heterotopic Ossification:** Bone can sometimes form abnormally in soft tissue around the hip after surgery. If that extra bone becomes extensive, it can restrict motion and occasionally require another procedure.
- **Avascular Necrosis:** Trauma can disrupt blood supply to bone, including the femoral head. If osteonecrosis develops and the joint deteriorates, additional surgery may be necessary.
- **Infection or Hardware Problems:** Deep infection, fixation failure, or painful hardware can complicate recovery and may require antibiotics, revision surgery, or later hardware removal depending on the problem.

Work Restrictions Can Outlast the Fracture's Initial Healing

A person who sits at a desk may be able to return to modified work before someone whose job requires climbing, carrying, squatting, driving, or standing for most of the day. Even after the surgeon allows more weight bearing, weakness and limited motion can make physically demanding work unsafe.

When the injury permanently changes the kind of work a person can perform, [lost earning capacity](#) can become as important as the wages lost during the first months of recovery. The medical restrictions need to be connected to the actual demands of the job rather than described only as a diagnosis.

Future medical care matters too. If the orthopedic surgeon believes post-traumatic arthritis is likely to require a later hip replacement, the claim shouldn't be valued as if treatment ended with ORIF. In major cases, a [life care planner](#) or other expert may help identify the expected costs of future surgery, rehabilitation, assistive devices, and related care.

The Medical Record Should Explain Why the Hip Still Matters Years Later

Acetabular fracture cases can be undervalued when the file is reduced to a surgery bill and a set of healed-fracture X-rays. The more important record often follows the joint over time: whether the hip remains painful, whether motion returns, whether the person develops a limp, and whether imaging begins to show cartilage loss or arthritis.

Operative reports can show the fracture pattern, cartilage injury, loose fragments, marginal impaction, or damage to the femoral head. Follow-up X-rays and CT scans can show healing and alignment. Therapy records can document gait and strength. Work notes can show when restrictions were lifted and what limitations remained.

Those details also help distinguish an acetabular fracture from a more general complaint of hip pain. If an insurer later argues that arthritis is age-related or that the person should have fully recovered once the bone united, the treating orthopedic record can show whether the crash permanently changed the joint.

A Settlement Should Account for the Hip's Likely Future, Not Just Today's Bills

The early medical expenses can be substantial, but the long-term cost may be harder to see. Additional imaging, orthopedic follow-up, physical therapy, injections, gait aids, revision surgery, or eventual hip replacement can extend the medical timeline well beyond the first year.

A [car accident settlement](#) should therefore be evaluated against the treatment the doctors reasonably expect, not simply the amount already billed. The same is true for time away from

work, reduced earning ability, pain, loss of mobility, and the effect on activities the person can no longer perform.

At [Gary Martin Hays & Associates](#), we've represented injured Georgians since 1993 and have recovered more than \$1 billion for Georgia families. With an acetabular fracture, we look at the full orthopedic timeline, from the crash mechanism and CT findings to fixation, rehabilitation, work restrictions, arthritis risk, and future surgery.

If you or someone you love suffered an acetabular fracture in a Georgia car accident, [contact us](#) for a free consultation. You won't have to pay an upfront attorney's fee to have us investigate the claim, and our fee is paid only if we recover compensation for you.