HIP FRACTURES

Hip Fractures are a serious health problem in the elderly population. They occur most commonly after trauma, such as a fall. As you age, bones loose minerals and become less dense. These conditions, such as osteopenia and osteoporosis, are two to three times more likely in women. Loss of density weakens bones and makes them more susceptible to fractures.

Hip Fractures

The hip joint is formed by two bones: a ball, which is the head of the femur bone, and the socket it sits in, the acetabulum of the pelvis. A hip fracture, which is a break in the top of the femur bone, can be a devastating injury. Fortunately, surgical repair of hip fractures is very effective in controlling pain and gaining ability to walk again. Modern treatment for a hip fracture aims at getting patients back on their feet again as the broken bone heals. The type of surgical correction generally depends on the portion of the femur that is broken, prior functional status, and condition of the bone. The two most common types of hip fractures are pictured below next to a normal hip. A femoral neck fracture is a break of the neck of the femur, between the head and shaft of the bone. An intertrochanteric hip fracture is a break between two trochanters at the top of the shaft of the femur, just below the neck.

Normal Hip

Fermoral Neck Fracture

Intertrochanteric Hip Fracture

Femoral Neck Fractures

Femoral neck fractures may be thought of as dissociation between the ball of the hip and remaining. Femoral neck fractures occur approximately one to two inches from the hip joint and are commonly repaired one of two ways:

Hip Pinning

This procedure is done through a small incision on the side of the hip. Three metal screws are placed across the fracture site to hold the bones in place while the fracture is healing. A hip pinning is commonly performed when a femoral neck fracture is identified, but the bones remain in acceptable alignment.

Hemiarthroplasty or Partial Hip Replacement

This procedure is preformed when the ends of the broken bone are not properly aligned after the fracture. The head and neck of the femur are removed and replaced with a metal prosthesis that fits into the cup on the acetabulum. Compared to a total hip replacement, only the femoral side of the joint is replaces, versus the femur (ball) and acetabulum (cup) of a total joint replacement.

Intertrochanteric Hip Fractures

Intertrochanteric fractures occur lower on the femur than the femoral neck fractures. Most of these fractures occur approximately three to four inches from the hip joint. This type of fracture is commonly fixed using a large hip screw attached to a side plate (Image A) or nail (Image B). The large metal screw aims to compress the broke pieces of the femur so that the edges will heal together over time. The large screw may be attached to a plate on the femur bone, or be incorporated into a nail that is placed into the canal (the soft, center of the bone) of the femur. These two methods aim to conserve a patient's own "ball" of the femur, instead of replacing it.

Image A

Image B

Rehabilitation after a Hip Fracture

Recovering from a hip fracture involves a lengthy period of rehabilitation. Progression is the recovery process that is established on an individual basis. Generally, the better the patient's health and activity level is before a hip fracture, the better their chances are for complete recovery after the fracture. After surgery, patients are assigned a weight-bearing status by the orthopedic surgeon to maintain during the recovery period. Patients must learn, with the help of physical and occupational therapists, to sit, stand, and walk in ways that are safe for them and their hip prosthesis.

After a hip fracture, patients require the help of a walking aid, such as a walker or cane. Depending on the type of fracture and surgical procedure, patients may need a walking aid for several weeks and possibly months. Assistance performing daily tasks such as dressing and bathing may be required. Many hip fracture patients need to stay in an extended care facility while recuperating, because they require assistance for daily living that is not available at home. The goal of extended rehabilitation is to assist the patient in regaining the prior level of function as soon as possible.

Care after Surgery

Patients need to observe their incision daily to watch for signs of infections, such as redness or drainage. Once the incision has healed, the staples or sutures are removed. This is often two to three weeks after surgery.

Blood clots are an important concern after an orthopedic procedure, including hip fracture repair. In order to reduce the risk of blood clots in the legs, known as DVT or deep vein thrombosis, patients take a blood thinner as directed by their surgeon. Most patients will take aspirin 325 mg twice a day for six weeks. Those patients who took the blood thinner Coumadin (Warfarin) before surgery or patients at higher risk for blood clots, may be prescribed Coumadin after surgery. Frequent mobility, when possible, is the best way to reduce the risk of postoperative blood clots in the legs. If a patient develops a dramatic increase in swelling or pain in one or both of their legs from the ankle to the knee, they need to contact their healthcare provider immediately. This is a common presentation of blood clots in the deep veins of the legs.

It is important that patients follow-up with their orthopedic team at The CORE Institute at the requested interval after surgery. Approximately six to eight weeks after surgery, you will have radiographs (x-rays) taken of the surgical hip. At this point, most patients show some signs of healing at the fracture site or for those patients who underwent a partial hip replacement, the prosthesis should be checked. Following the weight bearing instructions, along with the directions from physical and occupational therapists is also vital to the outcome of patient's surgery.