# Coding Hip Fractures



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Hip fractures are most commonly seen in elderly patients. They are a serious concern for this population because they can lead to a decreased quality of life, extended hospitalizations, or admission to nursing facilities.

Two of the most common causes for fractures are falls and osteoporosis. Falls among the elderly can be due to a number of etiologies, such as poor eyesight or other hazards in the house. Osteoporosis is a disease that weakens the bones and increases the chance of sustaining a pathological fracture.

Regardless of the extent of the osteoporosis, even a minor trauma can cause the affected bone to break. It can be difficult to tell the underlying etiology of the fracture, as a person can fall due to the hip fracture even if the fracture was pathological.

In order to properly code a fracture of the hip, coding professionals must know:

- Etiology-pathological versus traumatic
- Location-intertrochanteric, base, or other site
- Open or closed, if the fracture is traumatic

A pathological fracture is coded to 733.14 for the neck of the femur. Code 733.15 is used for other specified parts of the femur of a pathological fracture.

A traumatic fracture is coded to category 820, Fracture of neck of femur. The fourth and fifth digits are determined by the specific location of the fracture (e.g., epiphysis, intertrochanteric, or base of neck) and whether the fracture was open or closed.

Neck fractures of the femur are usually one to two inches below the head of the femur, whereas intertrochanteric fractures are located generally three or four inches below the head of the femur or the outer portion of the upper femur.

## Hip Fracture Treatment

The treatment to repair a hip fracture depends on the individual patient and the location of the fracture. Surgery is almost always recommended. Since the hip joint is a significant weight-bearing joint, the patient's activity level may be a factor in determining how to repair the fracture.

Three main procedures are performed to treat the fracture:

- Reduction (usually with internal fixation device)
- Hemiarthroplasty or partial hip replacement
- Total hip replacement

Generally, reductions are performed for intertrochanteric fractures that are well aligned. Coding professionals need to know if the reduction is open or closed and if internal fixation devices are used. The codes for these femur procedures are:

- 79.05, Closed reduction without internal fixation
- 79.15, Closed reduction with internal fixation
- 79.25, Open reduction without internal fixation
- 79.35, Open reduction with internal fixation

## Hip Replacement Procedures

The application of an external fixation device is coded separately from the fracture reduction with code 78.15.

Partial hip replacement procedures involve replacing part of the hip joint, which is usually the head and neck of the femur, with a prosthesis. The pelvic portion of the hip joint is left intact if the head and neck of the femur are replaced. The prosthesis is similar to the one used in a total hip replacement.

A partial hip replacement may also be referred to as a bipolar endoprosthesis. The code for a partial hip replacement procedure is 81.52. If the type of bearing surface is known, an additional code should be added from the 00.74–00.77 code range. Coding the bearing surface will help track the life of the implant. Repairing the hip joint without a prosthesis is coded to 81.40, Repair of the hip NEC.

A total hip replacement procedure involves replacing the entire hip joint with a prosthetic joint. In order to perform this procedure, numerous measurements are taken to ensure proper placement of the prosthesis so the functionality of the joint is restored.

During a total hip replacement, the diseased femoral head is removed and the acetabulum is prepared for placement of the prosthesis cup. Once the cup is placed, the surgeon drills a hole into the remaining femur to allow for placement of the stem. The stem provides support for the other portions of the prosthesis. The ball is sized and placed on the stem, and the joint is then aligned and closed.

Knowing the materials used in hip replacement surgeries will help facilitate coding the original and revision procedures. The physician determines which replacement device to implant; however, many patient factors play a role in this decision.

A patient who is younger and more active may receive a different implant than a person who is less active. A patient's weight and quality of bone also play a role in the decision.

There are four types of implants for hip replacements:

- Metal-on-polyethylene: This is the most common type of implant. All the prosthetic parts are metal. A plastic piece is placed between the ball and the cup of the prosthetic pieces. The metal is titanium, cobalt chrome, or stainless steel, while the plastic is polyethylene. This type of bearing surface is coded to 00.74.
- Metal-on-metal: This prosthetic does not place a plastic piece between the ball and cup. The metal is the same as in the metal and plastic prosthesis. This type of prosthetic lasts longer than the metal and plastic because the metal-on-metal has a lower wear rate. This type of bearing surface is coded to 00.75.
- Ceramic-on-ceramic: This type of prosthetic is more durable than the metal-on-metal and metal and plastic because it is more scratch resistant and smoother. This prosthetic was designed to increase the life of the prosthesis. This type of bearing surface is coded to 00.76.
- Ceramic-on-polyethylene: This type of prosthetic is more expensive than metal-on-polyethylene, but less expensive than ceramic-on-ceramic. This type of bearing surface is coded to 00.77.

The code for a total hip replacement is 81.51; again, an additional code is added for the bearing surface if known. Information for determining the bearing surface may be taken from the manufacturer's sticker as well as the provider's documentation. Additionally, if an image-guided navigation system is used during the replacement procedure, an additional code of 00.31, Computer-assisted surgery with CT/CTA, is assigned.

New techniques are being developed in an effort to reduce the patient's recovery time. One of these procedures is known as a minimally invasive hip replacement. The underlying procedure is the same, but it is performed a little differently as the incisions for performing the procedure are smaller.

## Hip Replacement Complications

Numerous conditions are considered complications of the prosthetic device of the hip. Common complications include wearing or loosening of the implant, fractures and dislocations of the prosthesis, and infections.

Wear of the articular bearing surface of the joint is assigned to code 996.46, with a secondary code to identify the hip replacement status, V43.64.

If the documentation states the patient has periprosthetic osteolysis, code 996.45 is assigned along with a secondary code of V43.64. Pain from the device is coded to 996.77, Other complication of internal joint prosthesis, followed by a code from category 338 to describe the pain and V43.64.

Coding fractures in hip joint replacements depends on the etiology and location of the fracture. If the fracture is of the actual device, complication code 996.43 is used. If the fracture is a periprosthetic fracture, code 996.44 is assigned. If the fracture is due to trauma or is pathological, then the appropriate trauma or pathological fracture code is assigned. Code V43.64 is assigned as an additional code regardless of which code is used for the fracture.

Dislocation of the prosthetic hip joint is coded to 996.42. This code includes instability or subluxation of the prosthesis. Again, V43.64 is assigned as a secondary code.

An infection in a joint prosthesis is also considered a complication of the mechanical device. Removal of the prosthesis and weeks of antibiotic therapy are required to clear the infection. Infections of prosthetic joints are coded to 996.66, Infection and inflammatory reaction due to internal joint prosthesis, followed by code V43.64. If the organism involved in the infection is identified, an additional code for that organism is coded.

Just because ICD-9-CM considers diagnoses complications does not meant that a patient received poor quality of care or a faulty device. All devices fail at some point in time. The typical lifespan of a hip replacement is 15–20 years.

## References

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