



# Identifying Hip Pain From Your Hip or Your Back

Many people planning total hip replacement surgery have back pain in addition to hip pain. Hip pain can result from conditions in your hip such as osteoarthritis or from problems with your back such as disc herniation or spinal stenosis. Symptoms from your hip and back can cause pain in the same area and sometimes overlap.

For most patients, the decision to have a total hip replacement is clear and obvious. Still, if you are planning hip replacement surgery you want to make sure that an operation on your hip will relieve your pain. The purpose of this article is to help you understand the difference between hip pain coming from an arthritic hip and pain coming from your back that might cause similar symptoms.

## Hip pain coming from your hip

The most common cause of hip pain in adults is osteoarthritis of the hip. This is a condition where the cartilage surfaces that line the joint break down. The ball and the socket of the hip joint rub against each other and there is no joint space left at all. When this happens, the hip joint becomes painful and loses range of motion. You may have pain when you are doing activities such as walking, climbing stairs, or bending over.

Sometimes you may have pain when you are just sitting and resting. You may even get pain at night that awakens you from sleep. Typically, the pain is in your groin (sometimes it feels like a neverending pulled muscle) and radiates down the front of your thigh to your knee. You may also feel pain on the side of your thigh or in the back of your hip in the buttock region. As your hip becomes stiffer and you lose motion you will have a harder time cutting your toenails, putting on socks and shoes, getting dressed, and getting in and out of a car. Your walking may be affected, and you may be limping.

# Hip pain coming from your back

The two most common back problems that can cause hip pain are disc herniation and spinal stenosis. Either of these conditions causes pressure on the nerves that supply feeling to your hip and leg. Even though the problem originates in your back, your hip may be painful. In fact, you may not have any pain in your back at all, only hip or leg pain.

Disc herniation means that a portion of the spongy disc material that sits between the vertebral bodies in your spine "herniates" outward. It then presses against your spinal cord or some of the nerves coming out of your spinal cord. Usually this will cause pain in one leg or another depending

on which side the nerve root is affected. If the L2, L3, or L4 nerve root is affected, you may get pain in your groin, the front of your thigh, or the side of your hip. This can be very similar or even identical to the pain that you would get from arthritis in your hip. You may have pain when you are moving around or walking or even when you are sitting, resting and doing nothing.

Spinal stenosis is a similar condition usually found in adults over the age of 60. Arthritis in your spine causes pressure on nerve roots and you may feel pain in your hip. With either of these conditions you may have hip pain similar to pain that you would get from arthritis in your hip.

## **Telling your symptoms apart**

While pain in your hip coming from either your hip or your back may feel similar, there are certain symptoms that may help you to separate the two. Pain from your hip is usually centered in your groin, goes to the side and back of your hip, and radiates to the front of your thigh. It rarely goes below your knee. There may be local tenderness and movement of the hip may cause pain. Often you will have decreased mobility in your hip. You may be unable to fully straighten your hip or your leg. You will have difficulty with certain activities of daily living.

Sometimes, if the hip is severely arthritic, there may be a crackling sound called crepitus. While some of the pain may be positional, it is typically greater with activity and aggravated by walking. By contrast, if a problem in your spine is causing your hip pain, you will have good range of motion in your hip joint (putting on shoes and socks and clipping your toenails are often not affected as mentioned above).

Symptoms from a disc herniation or spinal stenosis often radiate down your leg to your ankle and foot well below your hip. There can be numbness in your leg and weakness in your ankle or toes. You may often have nerve symptoms in your leg which get worse as you bear weight. With spinal stenosis, you may have no symptoms as you begin to walk but then develop burning and numbness followed by pain after you walk a short distance. The pain is then completely relieved by rest and patients often state they can walk more when leaning on a shopping cart (the hunched forward position makes it easier to walk). Unlike pain coming from your hip, you may experience symptoms in your whole leg. Sometimes back conditions can cause a change in ability to manage bowel and bladder function (something not associated with hip arthritis).

#### **Diagnostic tools**

If the cause of pain cannot be determined by your history and your doctor's examination, imaging studies such as x-ray or MRI may be helpful. An x-ray of the hip can diagnose osteoarthritis even in its early stages. X-rays will show narrowing of the space between the ball and socket, deformity of the ball of the femur (femoral head), and spurs around the hip joint. In severe cases there will be "bone on bone" with no joint space left at all. In addition, there may be small fluid filled spaces called cysts and hard bone called sclerosis in the femoral head and socket. X-rays can also diagnose other non- arthritic hip problems such as avascular necrosis (loss of blood flow to the ball of the hip joint) or a bone tumor.

In some cases, an MRI may be needed to confirm the diagnosis. An MRI is usually more helpful than a plain x-ray for pain coming from the spine. While an x-ray of the spine may show some arthritic change, an MRI is needed to show the position of the nerve roots. If there is a disc herniation, the disc material pressing on the spinal cord or one of the nerve roots will be clearly seen with MRI. In cases of spinal stenosis, an MRI will often show arthritic bone pressing directly on a nerve root.

It is, however, important to correlate the MRI findings with the location of the pain. For example, if the MRI shows pressure on a nerve root going to your right leg and the pain is in your left hip then your back is likely not the source of your hip pain.

### **Further diagnosis**

Many times, it is easy to separate the source of hip pain coming directly from your hip or from your back. However, if the cause of your pain is not clear from examination and imaging studies, then a procedure may help to make the diagnosis. A local injection of numbing medicine called lidocaine (similar to the medicine given when you get a tooth pulled or cavity filled) and a steroid preparation can be injected into your hip joint.

If this relieves the pain, you'll know that the symptoms are coming from your hip, and you are likely to have a good result from hip replacement surgery. By the same token, an epidural steroid injection into your spine may often relieve the nerve symptoms of a disc herniation or spinal stenosis. If this type of injection helps, then the pain is most likely coming from your spine.

#### Making a surgical decision

It is also possible to have hip pain coming from both your hip and your back at the same time. In this setting, making a decision about which problem to treat first can be difficult. Even if you plan hip or back surgery, the procedure may relieve some but not all of your pain. In some cases, this may mean treating one problem but still having some residual symptoms from the other.

It is therefore important to determine which of the two problems is more severe. If you have neurologic change such as the loss of feeling in your leg or weakness in your toes, then the back problem should be treated first. If the problem is hip pain alone coming from both your hip and your back, the decision becomes harder.

Many patients realize that they have pain from both areas but have a sense of which problem is more severe. You will need to meet with your orthopaedic surgeon to review your symptoms, physical findings, and imaging studies, such as x-rays or MRI. Your surgeon can offer some recommendations and help you make a decision on how to treat your pain. Most of the time the decision to have a total hip replacement is straightforward. But if you have any questions about related symptoms, talk to your orthopaedic surgeon.