
Understanding Core Decompression of the Hip

Core decompression of the hip is a type of surgery. It's done by drilling into and removing diseased bone in the femur bone of the hip joint. Your healthcare provider may advise this surgery if you have osteonecrosis. This is a condition where bone starts to break down due to reduced blood flow.

Core decompression surgery can help relieve any hip pain you are feeling. It may help the bone heal. And it can prevent more damage to the hip joint.

The hip joint: A ball-and-socket joint

The hip joint is one of your body's largest weight-bearing joints. It's a ball-and-socket joint.

The hip joint is made of 2 main parts:

- **Femur.** This is the top part of your thigh bone. It has a round, ball-shaped head.
- **Acetabulum.** This is the socket of the hip bone.

The rounded femur fits inside the socket (acetabulum). When you move your hip, your femur rotates in the socket. This lets your leg move in different directions.

Why core decompression is done

This procedure is often used to treat osteonecrosis. This condition occurs when bone tissue dies due to lack of blood supply. This can affect any bone in the body. But it most often affects the hip. This happens when the blood supply to the head of the femur (the ball-shaped part of the hip joint) is slowed down or cut off.

Over time, the bone breaks down. This can lead to arthritis. You may have pain, stiffness, and trouble moving. Without treatment, a total hip replacement will often be needed.

Core decompression works best if you are in the early stages of osteonecrosis. This is when only a small part of the femur head is affected. Once the dead bone is removed, new blood vessels can develop. And new, healthy bone starts to be made.

How core decompression is done

Before the surgery, you will have an MRI done of your hip joint. This shows your surgeon where the diseased bone is that must be removed.

For the procedure, the surgeon will drill a hole or holes into the diseased bone at the head of the femur. They may drill 1 large hole or many small holes. This eases the pressure in the bone. It also makes pathways so that new blood vessels can reach the affected part of the hip.

As part of the procedure, your surgeon may also do one of the following:

- **Bone graft.** This may help regrow new, healthy bone. To do this, the surgeon injects healthy bone tissue into the holes they have drilled. This bone tissue may be taken from another part of your body (autograft). Or it may come from a donor bone bank (allograft).
- **Synthetic graft.** In some cases, your surgeon may advise a synthetic bone graft. Or they may want to use your bone marrow cells mixed with the synthetic bone graft.

Talk with your surgeon about which bone graft options may be right for you.

After the surgery

After the surgery, you may need to use crutches or a walker for about 3 months. This is so you don't put any stress on the affected bone.

Risks and possible complications

In general, this is a safe surgery. But as with any surgery, there are some risks. These include:

- Infection at the surgical site. Symptoms include swelling, pain, warmth, and fluid leaking from the surgical site.
- Surgery doesn't stop the condition from getting worse
- Damage to the articular cartilage
- Fracture of the femur