

Although nonsurgical treatment options like medications or using crutches can relieve pain and slow the progression of the disease, the most successful treatment options are surgical. Patients with osteonecrosis that is caught in the very early stages (prior to femoral head collapse) are good candidates for hip preserving procedures.

### ***Core Decompression***

This procedure involves drilling one larger hole or several smaller holes into the femoral head to relieve pressure in the bone and create channels for new blood vessels to nourish the affected areas of the hip.

When osteonecrosis of the hip is diagnosed early, core decompression is often successful in preventing collapse of the femoral head and the development of arthritis.

Core decompression is often combined with bone grafting to help regenerate healthy bone and support cartilage at the hip joint. A bone graft is healthy bone tissue that is transplanted to an area of the body where it is needed.

Many bone graft options are available today. The standard technique is to take extra bone from one part of your body (harvest) and move (graft) it to another part of your body. This type of graft is called an autograft.

Many surgeons use bone that is harvested from a donor or cadaver. This type of graft is typically acquired through a bone bank. Like other organs, bone can be donated upon death. There are also several synthetic bone grafts available today.

### **Outcomes**

Core decompression prevents osteonecrosis from progressing to severe arthritis and the need for hip replacement in 25% to 85% of cases. This depends upon the stage and size of the osteonecrosis at the time of the procedure.

Core decompression achieves the best results when osteonecrosis is diagnosed in its early stages, before the bone collapses. In many of these cases, the bone heals and regains its blood supply after core decompression. It takes a few months for the bone to heal, and during this time, a walker or crutches will be needed to prevent putting stress on the damaged bone.

Patients with successful core decompression procedures typically return to walking unassisted in about 3 months and have complete pain relief.

When osteonecrosis is diagnosed after collapse of the bone, core decompression is not usually successful in preventing further collapse. In this situation, the patient is best treated with a total hip replacement, which relieves pain and restores function in 90% to 95% of patients.

