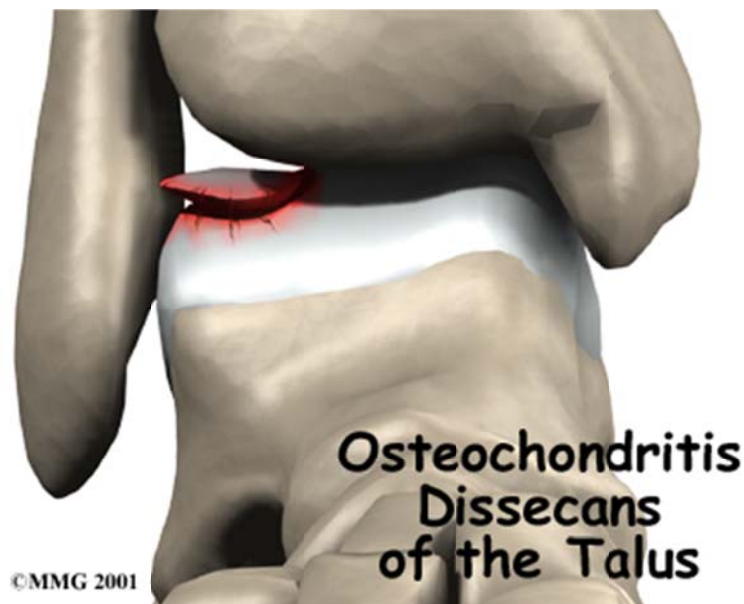


Osteochondritis Dissecans of the Talus

Introduction



Welcome to BodyZone Physiotherapy's patient resource about Osteochondritis Dissecans of the Talus.

Osteochondritis dissecans (OCD) is a problem that causes pain and stiffness of the ankle joint. It can occur in all age groups. Most cases of OCD usually follow a twisting injury to the ankle and are actually fractures of the joint surface.

This guide will help you understand:

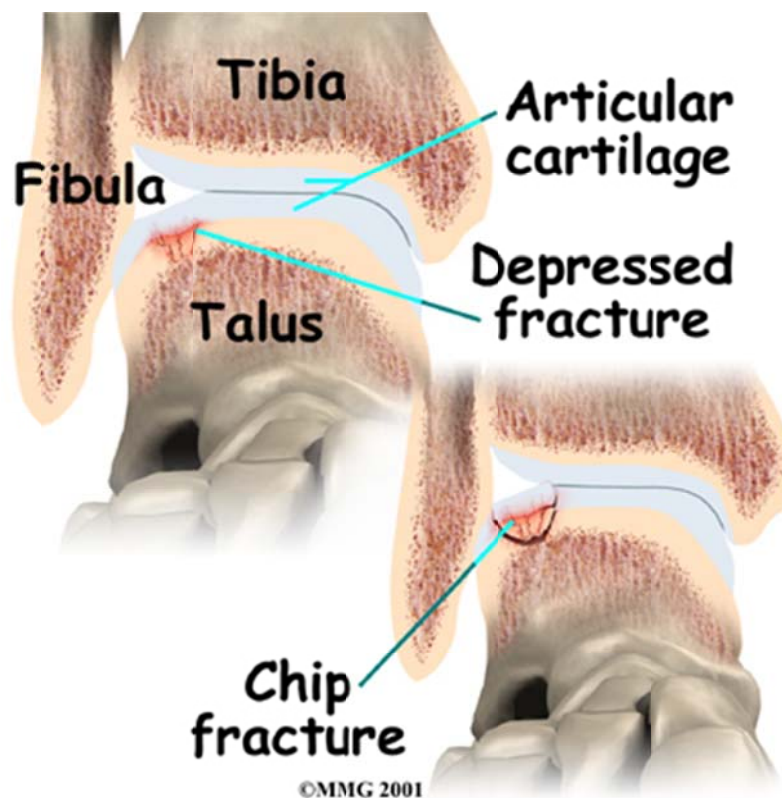
- how OCD develops
- how the condition causes problems
- what can be done for your pain

Causes

How does OCD develop?

The cause of most cases of OCD are thought to be actual chip-type fractures. These fractures occur with severe ankle sprains. Which side of the talus the chip is on depends on how the ankle was twisted during the initial injury.

The chip fracture can vary in size and severity. If the bone underneath the cartilage is crushed or cracked and the articular cartilage is intact, the fragment is less likely to move. If the articular cartilage is broken as well, the bone fragment may move out of position, or *displace*, making healing less likely and later problems more likely.



Because the bone chip is separated from the rest of the talus, the blood vessels traveling to the fragment through the bone of the talus are torn, and the blood supply of the bone fragment is lost. If the fragment displaces, these blood vessels cannot grow back. The fragment loses its blood supply and actually dies. This makes healing less likely.

There is some evidence that the twisting injury may not cause a chip fracture initially. However, it may injure the bone's blood supply, leading to an area of the bone actually dying. This may explain some cases of OCD that appear without a well-defined history of a recent serious twisting injury.

Symptoms

What does OCD feel like?

Initially, OCD behaves like any other ankle sprain injury. You will feel swelling and pain and have difficulty placing weight on the ankle. No special symptoms suggest a chip fracture has occurred inside the joint. X-rays are the best way to determine whether a chip fracture has occurred.

Later, continued problems with the fragment may cause swelling and a generalized ache in the ankle. You may also feel a catching sensation with the ankle in certain positions. This is because the chip can get caught in the ankle joint as it moves, causing pain and the sensation of catching.

Diagnosis

How will my health care provider know it's OCD?

When you first visit BodyZone Physiotherapy, our physiotherapist will examine your foot and speak with you about the history of your problem. Diagnosis of osteochondritis dissecans (OCD) is generally made during the history and physical examination.

Some patients may be referred to a doctor for further diagnosis. Once your diagnostic examination is complete, the physiotherapists at BodyZone Physiotherapy have treatment options that will help speed your recovery, so that you can more quickly return to your active lifestyle.

Our Treatment

Non-surgical Rehabilitation

Treatment for OCD depends on when the problem is discovered. If the problem is discovered immediately after a twisting injury to the ankle, immobilization in a cast or boot for six weeks may be suggested to see if the bone injury heals. You may need to keep weight off the foot and use crutches during this period of immobilization. Your physiotherapist at BodyZone Physiotherapy can instruct you in the proper use of crutches so that you don't put too much weight on your healing foot. We can also provide you with stretches, exercises and other supportive care to help speed your recovery once your cast or boot are removed.

Post-surgical Rehabilitation

Patients normally require crutches to keep from putting weight on the ankle for four to six weeks after surgery. You will probably wear a bandage or dressing for a week following the procedure. The stitches are generally removed in 10 to 14 days. However, if your surgeon used sutures that dissolve, you won't need to have the stitches taken out.

Our physiotherapists usually have OCD patients begin their therapy by doing motion exercises very soon after surgery. Patients wear a splint that can easily be removed to do the exercises throughout the day.

Your first few physiotherapy treatments are designed to help control the pain and swelling from the surgery. Our physiotherapists will also work with you to make sure you are only putting a safe amount of weight on the affected leg.

We will choose exercises to help improve your ankle motion and to get the muscles toned and active again. Our physiotherapist will initially place emphasis on exercising the ankle in positions and movements that don't strain the healing part of the cartilage. As your program evolves, we will choose more challenging exercises to safely advance the strength and function of your ankle.

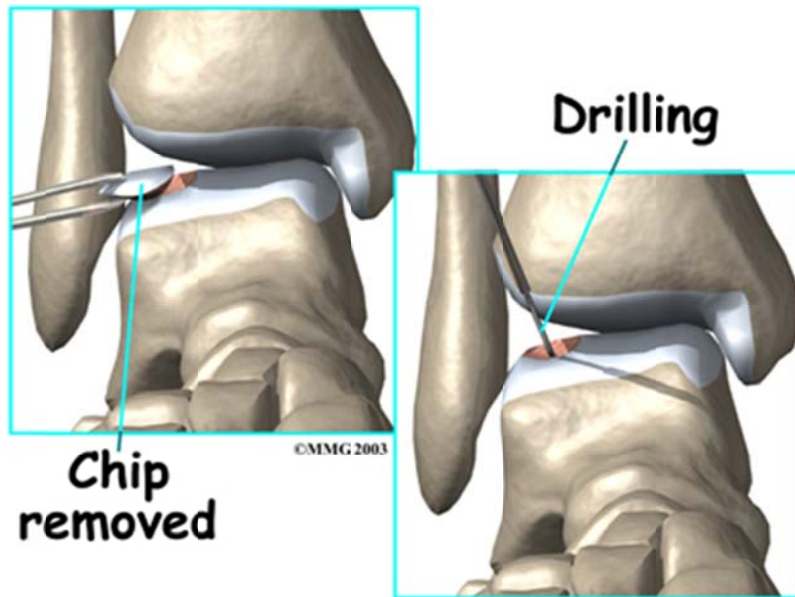
Some of the exercises we provide are designed to get your leg and ankle working in ways that are similar to the activities you do every day, such as rising on your toes, walking, and going up and down stairs.

At BodyZone Physiotherapy, our goal is to help you keep your pain under control, ensure safe weight bearing, and improve your strength and range of motion. When your recovery is well underway, regular visits to our office will end. Although we will continue to be a resource, you will be in charge of doing your exercises as part of an ongoing home program.

Surgery

If the problem is not recognized early, the bone fragment may not heal and may continue to cause problems. Surgery may be required to try to reduce your symptoms at this point.

Surgery usually involves removing the loose fragment of cartilage and bone from the ankle joint and drilling small holes in the injured bone. When the fragment is removed, a defect shaped like a small crater is left in the talar dome. It is this area where the drill holes are made. The drill holes allow new blood vessels to grow into the defect and help to form scar tissue to fill the area. Eventually this new scar tissue smoothes out the defect and allows the ankle to move more easily.



Arthroscopic Method

In some cases the surgery may be done using an *arthroscope*. An arthroscope is a special miniature TV camera that is inserted into the joint through a very small incision. Special instruments are inserted into the ankle through other small incisions. By watching on the TV screen, the surgeon removes the fragment and drills the defect.

Open Method

The ankle is a small joint, so it is sometimes difficult to get the arthroscope into certain areas. If the defect is in an area of the ankle difficult to reach with the arthroscope, an *open incision* may be required. This incision is usually made in the front of the ankle to allow the surgeon to see into the joint. Special instruments are used to remove the fragment and drill the injured area.