

Osteonecrosis Explained

How many times have you heard of a patient who suffers with arthritis? The word "arthritis" is often used as a sort of umbrella term describing pain and stiffness in the joints. In reality, there are more than 100 different types of arthritis. Many of these, including osteonecrosis, can have an irreversible and debilitating effect on the body.

What is Osteonecrosis?

Osteonecrosis is a severe form of arthritis in which the bone loses its blood supply. As the disease progresses, the affected bones and joints will disintegrate, ultimately causing the death of the bone. It's difficult for doctors to treat this condition in its early stages, because the patient does not usually manifest symptoms until the disease has reached an advanced stage.

Symptoms

The most common symptoms of osteonecrosis are sensations of pain and stiffness following a period of physical activity. Many patients who develop osteonecrosis in the hip will experience concentrated pain in the groin area. In the early stages of the disease, pain is evident only when the affected area is in use. As the disease becomes more advanced, pain is felt even while the joint is at rest.

Diagnosis

Doctors are able to make a positive diagnosis of osteonecrosis through the use of X-rays. However, X-rays are only able to reveal cases that have progressed beyond the initial stages. Some healthcare professionals will also use magnetic resonance imaging (MRIs) to detect tissue damage. Some patients will require a CAT scan before a firm diagnosis can be made.

Treatment

Aggressive treatment may be required to stop the disintegration of the joints. The earlier the disease is diagnosed, the better the chance that the affected areas can be saved. If the disease has progressed into the advanced stages, however, it may be too late to treat and save the damaged joints.

Many cases of osteonecrosis will require one of several types of surgical intervention:

* **Core Decompression:** This is a relatively simple procedure best reserved for cases where the symptoms are still fairly mild. The procedure consists of creating a hole to remove a thin layer of the affected bone. This helps increase blood flow to the bone, and reduces pressure.

* **Bone Grafting:** A common yet complicated procedure used to support affected joints. During the grafting process, healthy bone is removed from one part of the body and used to replace dead bone in the affected area. This surgery is reserved for patients experiencing osteonecrosis in its final stage. Following a bone graft, the patient will be required to use an assistive device for up to a year after surgery, to promote healing.

* **Osteotomy:** Doctors perform an osteotomy by cutting the bone below the affected area. The bone is then turned, allowing the healthy part of the bone to become the new weight-bearing area. It is a complicated procedure and reserved for patients experiencing advanced osteonecrosis.

* **Arthroplasty:** Also known as a total hip replacement, this surgery is only used when the entire hip socket has become diseased. The damaged hip is removed, and an artificial joint is inserted in place.

When an osteonecrosis diagnosis is made early enough, it may be possible to treat the disease without surgery. Doctors may choose to prescribe drug therapies in an attempt to keep the disease from progressing. Medications, when combined with exercise and assistive devices, can be used successfully in less advanced cases. Researchers are now working to produce new medications that help to promote the growth of new bone matter while increasing blood flow to the damaged joints.

Like most diseases, early detection is key to successful treatment of osteonecrosis, however it is not easily diagnosed. If you feel that you may be experiencing the symptoms of osteonecrosis, ask your doctor to perform further tests. If diagnosed early enough, you may be able to treat the condition and relieve the symptoms without surgery.