

Avascular Necrosis & You

What is it?



Avascular necrosis (also known as “AVN” or osteonecrosis) is a rare condition that affects bone. It occurs when blood supply to bone tissue is cut off. When bone cells and bone marrow cells are starved of their blood supply, they can die. This can lead to mechanical failure (collapse) of the bone.

AVN most commonly occurs in the hips but it can occur in any bone tissue. It can affect one side of the body or both sides. Several things can trigger interruption of blood supply to the bone. For example, AVN can result from a trauma to the bone or joint such as a fracture or dislocation.

Prolonged use of high-dose steroids, such as prednisone, has been linked to AVN. Excessive alcohol intake and cigarette smoking can also increase the risk of AVN. Other medical conditions including lupus have also been linked to AVN.

What is it going to do to me?



Pain is the most common symptom of AVN. It is often localized to the area of affected bone. At first, the pain is usually felt during weight bearing. But eventually, the pain may occur even at rest or during the night.

Sometimes pain is the only symptom. But when a nearby joint is damaged, there can also be a limited range of motion. Pain may worsen when the affected joint is used.

A clue to suspecting AVN is an amount of pain that is out of keeping with what is seen on an X-ray or pain after a fracture that just won't go away. If this is the case, then an MRI or bone scan might be needed to diagnose AVN.

Visit RheumInfo.com



RheumInfo.com is a free educational website where you can learn more about AVN and treatments for the condition. The website is operated by Dr. Andy Thompson, a rheumatologist.

What can I do about it?



AVN is a serious condition that requires urgent care. If you have AVN or think you have it, see your family doctor. Depending on the cause of AVN, you may be referred to an orthopedic surgeon, a specialist in bones, muscles and tendons. If AVN is associated with an inflammatory disease such as lupus, you may be referred to an arthritis specialist called a rheumatologist.

The first step in treating AVN is to determine the extent of damage to the bone and nearby joints. The next step usually involves resting the affected bone and joints.

There are no specific medications for treating AVN or slowing the progression of the condition. Medications are usually targeted at relieving the pain of AVN. These might include non-prescription analgesic medications such as acetaminophen (Tylenol) or non-steroidal anti-inflammatory drugs (NSAIDs). When these are not enough to control pain, stronger medicines called opioids may be used.

If AVN is associated with prolonged steroid use, it is important to taper (reduce) the dose if possible.

Surgery may eventually be needed if AVN continues to progress. There are many approaches to surgery including revascularization and joint replacement. You should talk to your doctor about which approach is right for you.

Here are some other recommendations:

- **Learn as much as you can about the condition**
- **If you drink alcohol it is best to limit your intake**
- **If you are a smoker, it is important to quit**
- **Learn about the medications used to treat the pain of AVN**



AVN can be like a damaged bridge that collapses

You can think of AVN like a bridge that loses its structural integrity. If the concrete supporting a bridge falls off, the bridge might be safe for a while. But if too much concrete falls off or if it falls off from a critical section, the bridge can collapse.

Likewise, AVN can be trouble when it occurs near a joint. The bone surrounding the joint can lose its integrity and collapse. This can result in abnormal wear of the joint and premature failure.