

Avascular necrosis

What is avascular necrosis?

Avascular necrosis is a condition where the ball part of the hip socket joint (the femoral head) loses its blood supply. Without a good blood supply to bring in nutrients, the bone and marrow cells die and eventually the femoral head collapses. This leads to arthritis.

Avascular necrosis tends to affect young and middle-aged people. We don't always know why it occurs, but it is linked to previous injury (e.g. hip dislocation), taking steroid medication and drinking too much alcohol.

What are the symptoms of avascular necrosis?

In the early stages of the condition, there may not be any symptoms. As it progresses, you may feel pain:

- when you stand on the affected leg (as the condition worsens, pain may occur all the time)
- in the groin, thigh or buttock of the affected leg, but also pain in other places that avascular necrosis can occur (e.g. knee, hand, foot and shoulder)

Avascular necrosis may affect the hip joints on both sides.

What does your doctor look for?

Your doctor will review your medical history, including medications and alcohol consumption, and inquire about your pain: when it started, where it is most intense, and whether certain positions alleviate or exacerbate it.

Your doctor will also examine your hip, checking for tenderness and evaluating its range of motion.

What investigations are needed?

There are many different disorders that cause hip pain and imaging can be useful in making a diagnosis. Your doctor may request:

- X-rays, which can show changes in the later stages of avascular necrosis but are usually normal in the beginning
- a CT or MRI scan, which can show early changes
- a bone scan

How is avascular necrosis treated?

Treatment for avascular necrosis will depend on the amount of bone damage that has occurred.

In the early stages of the condition, treatment options include:

- non-drug therapy (e.g. physiotherapy, rest and electrical stimulation)
- medications (e.g. anti-inflammatories, osteoporosis drugs, blood thinners)

For more advanced cases, treatments are:

- bone transplant or bone reshaping, which are usually done via arthroscopy
- hip joint replacement