



Bones Sickle Cell

1600 7th Ave S • Birmingham, AL 35233 • 205.638.9285 • Hematology/Oncology Clinic 8

How can sickle cell affect the bones in my body?

Sickle cell can impact a patient's bones when the red blood cells sickle and stop blood flow in the bones. When this happens, the bone does not get enough oxygen and that area of the bone can die. This can cause the patient to have a few issues:

- 1) Pain: The patient may develop severe pain in that area of the bone. You may know this by pushing on the area of pain and causing a significant amount of pain (more than usual in one spot for a pain crisis).
- 2) Avascular necrosis: Avascular necrosis occurs when an area of the bone repeatedly loses oxygen. Over time this bone becomes weak and may start to breakdown. This often occurs in either the hips or the shoulders.

How will I know if a patient has avascular necrosis?

- Patients who develop avascular necrosis first have pain in their hips or shoulders with weight-bearing activities or exercise.
- Over time this pain continues to occur even during rest.
- If you are concerned that you have avascular necrosis, speak with your doctor. He/she may order x-rays, MRI scan, CT scan, or a bone scan.
- MRI may be the best test to detect early stages of avascular necrosis
- X-ray will detect later stages of avascular necrosis.

How can avascular necrosis be treated?

Your sickle cell medical team will refer you to a bone doctor who specializes in surgeries to improve avascular necrosis.

What can I do to prevent avascular necrosis?

- We do not have clinical trials to provide full evidence of how to prevent avascular necrosis.
- We recommend continuing your sickle cell therapies to improve your overall health.
- Tell your health care provider if you are having joint pain or limping.
- If you are prescribed physical therapy, please follow instructions for home therapy to improve your health.