How do I know if I have a spine or sacral fracture?

Only your doctor can properly diagnose a spine (vertebral compression) or sacral fracture with the assistance of diagnostic imaging like MRI or X-ray. However, some of the more common symptoms include:

- Back pain, and possibly additional pain in the hip, abdomen or thigh
- Numbness, tingling and weakness
- Loss of height/hunched appearance
- Difficulty breathing
- Urinary incontinence

If you are experiencing these symptoms, talk to your doctor.

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CU Medicine Interventional Radiology

An interventional radiologist is a doctor who undergoes an average of 13 years of education and training. In addition to being a diagnostic radiologist, they have had subspecialized (fellowship) training in vascular & interventional radiology, where they perform minimally invasive procedures using imaging guidance. CU Medicine interventional radiologists have a wealth of clinical experience, and our multidisciplinary approach ensures that patients receive the right care for their unique condition.

Learn more at CUMedicineIR.com

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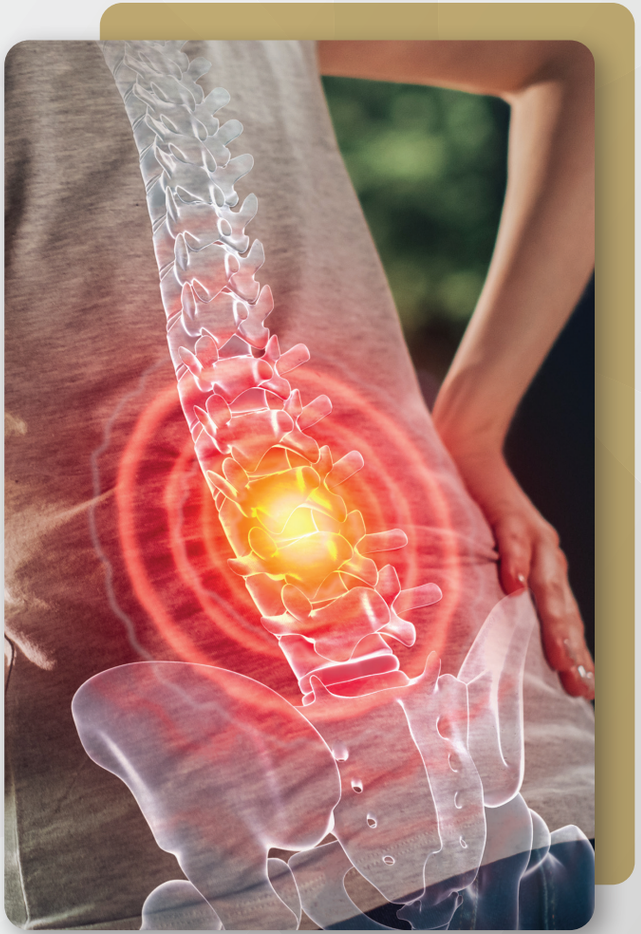

Treating spine fractures without surgery

Vertebral Augmentation

Interventional Radiology
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Vertebral Augmentation

A spine fracture—or vertebral compression fracture (VCF)—occurs when one of the bones within the spinal column weakens and collapses. Sacral insufficiency fractures (SIFs) are fractures that occur in the sacrum, the triangular bone at the base of the spine. These fractures can be a cause of great pain, and left untreated, can lead to more serious health problems and/or permanent deformity.

What causes spine and sacral fractures?

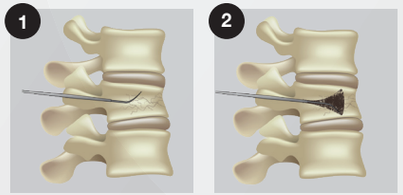
Nearly one million spine fractures are diagnosed each year in the United States, and osteoporosis is most often the cause. Women over 50 have the greatest risk for osteoporosis, but Caucasian and Asian women are at a higher risk than women of other ethnicities. Because osteoporosis is a disease that affects bone density, those with this condition can more easily develop spine and sacral fractures.

Studies have shown that individuals with a spine fracture are at a much higher risk of developing additional fractures, reduced lung function, difficulty controlling the bladder or bowels, decreased quality of life and even death.[1,2,3]

Treating spine and sacral fractures

Back braces, pain medication, and bed rest are conservative methods of treating spine and sacral fractures, but they do not address the root cause of the problem, nor do they provide lasting pain relief.

Minimally invasive treatments are now available from CU Medicine Interventional Radiology: Vertebroplasty, kyphoplasty and sacroplasty. Using imaging guidance, our interventional radiologists can repair the fracture without the need for open surgery. These procedures are performed in a comfortable outpatient center and provide immediate relief from pain and other symptoms.



Instrument Inserted Cement Filled

Vertebroplasty

During vertebroplasty, our interventional radiologist uses fluoroscopy (x-ray) imaging to guide a needle into the fractured vertebra. A special, fast-drying bone cement is injected into the fracture to stabilize it. 90% of patients experience pain relief and improved mobility within 24 hours of the vertebroplasty procedure.[4]

Balloon Inserted Balloon Inflated Cement Filled

Kyphoplasty

Kyphoplasty is similar to vertebroplasty in that the interventional radiologist uses imaging to guide a needle into the fracture. However, once there, a special balloon is inflated, restoring height to the vertebra. The balloon is deflated and removed, and the fast-drying bone cement is injected into the hollow cavity made by the balloon. The cement hardens, stabilizing and strengthening the bone in its original shape.

Sacroplasty

With sacroplasty, the interventional radiologist makes a small incision over the fracture site, then inserts a hollow needle, guided by imaging, into the fracture. The fast-drying bone cement is injected into the fracture, stabilizing the bone and relieving pain.

Fast, effective results

The vast majority of vertebral augmentation patients have reported that these procedures provide immediate pain relief and have improved their quality of life.[5] Patients who undergo kyphoplasty experience lower mortality and morbidity than patients who receive conservative management.[6] Patients requiring opioid treatment decreased from 64.8% to 8.1% after sacroplasty.[7]