Common Fractures
MU Patient Education Series

Definition:
A fracture is a breakage of a bone, either complete or incomplete. Fractures occur when bones undergo a trauma, impact or force that is stronger than the strength of the bone. Bone fractures may also be a result of age and/or disease. There are various types of fractures. The severity depends on the strength of the traumatic force and the location of the damaged bone.

CAUSES:

Fractures and broken bones occur due to a variety of situations. They may occur because of a fall, an automobile accident, a direct blow or repetitive forces such as jogging or simply from a weakening of the bone. When the bone cannot withstand the force of the pressure, it will fracture, or break.

COMMON FRACTURES:

There are certain types of fractures that are more prevalent than others. Some of the more common types of fractures include:

- Stress fracture
    - Fractures involving the overuse of a certain bone. For example, in runners, repeated trauma to the same location can cause the bone to fail to absorb shock. This weakens the bone and can lead to a fracture.

- Compression fracture
    - Fractures involving bone breakage in the spine. These occur when the bones lose their calcium content due to a condition called osteoporosis.
    - They may also occur due to trauma, cancer or other conditions.

- Skull fracture
    - A skull fracture is a break in the cranial (skull) bones that may occur with head injuries.

- Rib fracture
  - Rib injuries are common and are often the result of a direct blow. These fractures can seriously affect the lungs and breathing. If the lungs are blocked, an infection can result.

- Fractures in children
  - Children are more prone to fractures because of their constant activity. Fractures in children can be harder to locate and diagnose because their bones may not be developed completely, and often there is more cartilage than calcium in their bones. Though the calcium content makes children's fractures harder to diagnose, their softer bones heal much faster than adults' bones.

Signs/Symptoms:

As you can imagine, breaking a bone can be extremely painful. This pain not only occurs because you are breaking apart your bone, but for other reasons such as:

- Pain fiber accumulates in the nerve endings surrounding our bones
- Fibers become irritated
- Swelling
- Muscle spasms

Other signs of a broken bone include:

- Bruising
- Swelling
- Bleeding
- Bone protruding from skin
- Numbness
- Tingling
- Inability to move your limb or limited mobility
- Visibly deformed limb/joint

If you or someone around you is experiencing any of these symptoms, seek immediate emergency care.

Diagnosis/Tests:

It is important to receive immediate care after a broken bone injury. The pain will most likely lead to an instant visit to the hospital or your doctor's office. Sometimes, the diagnosis of a fracture is easy because there is obvious deformity. In this case, your doctor will provide relief from your pain and most likely take X-rays.

TREATMENT/CARE:

Most fractures are initially treated using a splint. Immobilizing the limb is necessary for healing and pain control. After a few days of the soft splint, most patients receive a hard cast. This cast is not utilized immediately because the broken limb will swell. Depending on the severity and location, surgery also may be required.

CALL YOUR HEALTHCARE PROVIDER IF:

Fractures can be very painful and, depending on the location, very serious. It is important to call 911 immediately if you or somebody around you undergoes a trauma and is experiencing any of the following:

- A suspected head, neck, back, hip, pelvis or upper leg injury
- Severe bleeding, swelling or cold, clammy, blue skin around the injury
- Complete immobilization
- Bone protruding through the skin.