

Sternum Fracture

Sternum fractures are identified by a break in the breast bone that lies at the front of the chest. There are 12 rib bones on either side of the body, as well as the sternum, which forms the entire front wall of the chest. The sternum provides an attachment point for the two clavicles (collar bones) on either side of the upper chest and the upper seven ribs.

Sternum fractures result from a direct blow to the sternum. Fractures to the sternum are rare. Much more commonly a hit to the sternum will result in bone bruising or rib bruising. Trauma most commonly occurs during contact sports such as martial arts, rugby, football and hockey.

Due to the tremendous amount of force required to break the bone, these fractures may be associated with damage to other organs and structures of the body known as the ribs, heart, vertebrae, lungs, blood vessels and soft tissue. These injuries can be quite serious and complications are common when the fracture is displaced.

Sternum Fracture Anatomy

The ribs protect and encase the chest cavity, which is where a number of vital organs are located. To ensure the protection of these organs, the rib cage is composed of long, curved individual bones with joints that connect to the spinal vertebrae. At the chest, multiple rib bones connect to the sternum by means of costal cartilage.

Even though they are fixed in position, the ribs do allow for some degree of movement, which helps to stabilize the chest when exhaling or inhaling. The rib cage is made up of 24 bones, each one is symmetrically aligned with one on the opposite side of the body. Out of all 24 ribs, the first seven pairs are called true because they are connected to the costal cartilage, whereas the other five sets don't.

How to Treat a Sternum Fracture:

1. Surgery

If the fracture is complicated, or you have a bony displacement, you might have to go through surgery to restore the bony alignment and correct the bones using plates or pins.

2. Rest

Anyone with a sternum fracture needs to take the time to rest from activities increasing pain. Any activity placing a large amount of stress on the sternum should be avoided, especially lying face down and placing direct pressure on the chest. Resting allows the aggravated areas time to heal.

Tips:

- Apply ice gently to the sternum for 5-10 minutes at a time three to five times per day to help alleviate pain and swelling. Discuss with your doctor or therapist if this will help.
- Take all the medications prescribed by the correct dosage as advised by your doctor.
- Partake in exercises to help improve strength, flexibility and posture, as well as preventing weakness and stiffness from setting in. This should be done under supervision of a therapist and only when the fracture has recovered.
- Gradually return to any sports activities to prevent reinjuring the site.

- Don't ignore symptoms or expect them to go away on their own. You need to seek treatment to aid in the healing process.
- Whenever riding in an automobile, make sure you are always wearing your seatbelt to help protect you in the event of an accident.