Sternal fracture

What is a sternal fracture?

The sternum or breastbone is the bone in the front and center of the chest. Your ribs and clavicle (collar bone) attach to your sternum. A sternal fracture is a break in this bone. The most common cause of a sternal fracture is trauma. It can occur with direct blow to front of your chest, fall or motor vehicle accidents where your chest hits the steering wheel or seat belt.

Common symptoms include:

- Chest pain at time and site of injury
- Pain with breathing, coughing, or sneezing
- Shortness of breath
- Bruising and tenderness of front of chest.

Diagnosis: The fracture may have been found with an x-ray or CT scan. An EKG or ultrasound may be performed to look at your heart, major blood vessels, and lungs to make sure there is no damage to these organs.

Treatment: Most sternal fractures will heal in several weeks and do not require surgery. Treatment will often be pain control and avoiding activities that may reinjure your sternum. It is important to continue to take deep breaths and cough to prevent pneumonia. It is important you do not smoke as this will slow bone healing. Continue to take your pain medications as prescribed.

These are some precautions to help you while your sternum heals:

- Brace your chest when coughing, sneezing, or turning. You will need to hold a pillow or cross your arms over your chest (this is called splinting). This is most important to prevent pneumonia.
- Do not lift push or pull anything over 10 pounds.
- Avoid any maneuvers that cause you pain such as repetitive overhead reaching
- Do not reach back with both arms at the same time
- Do not push or pull with your arms when moving or getting out of bed.
  - Lower yourself to side and bring your feet onto the bed.
  - Use your legs to help change position in bed

When to call your provider or seek medical attention: Call your care team if you have severe pain that is not controlled with medication or has worsened, increase difficulty breathing, chest pain or have fast heartbeat, develop pain in shoulders or pain that goes into jaw or arms. Also call if you have a fever, clicking sound coming from your chest or worsening redness in the middle of your chest as these may be signs of infection.

During normal business hours call 612-626-3711, this will direct your call to the clinic nurse. After hours, nights or weekends call the page operator 612-273-3000 and ask them to page the trauma provider on call. In emergencies call 911 or go the closest emergency department

References:
Adapted from Fairview, Sternal Precautions.
Pasquale, M, Nagy, K, Clarke, J: East Practice Management Guideline for Screening of Blunt Cardiac Injury. East Association for the Surgery of Trauma. 1998. 1-20