

# Rib Fractures

## General Information

There are 12 pairs of ribs, which are attached to the vertebrae (backbone), in the back and of which 10 are attached in the front to the sternum (breastbone) by cartilage. The ribs function as protection for the vital organs in the chest cavity such as the heart, lungs, liver, and spleen. Between the ribs are small muscles for support, which are called the intercostals. The ribs attach to the sternum with cartilage at locations called the costochondral junctions.

A direct blow to the ribs normally causes a fracture. Because the ribs are close to the skin surface and don't have as much protection as other bones, they are vulnerable. Simple rib fractures are the most common form of significant chest injury. Costochondral separations can also occur where a rib separates from the sternum. These result in pain similar to a rib fracture and if the dislocation is complete, there may be a palpable defect. A severe blow to the chest may also result in a fractured sternum or breastbone. Again signs and symptoms resemble a rib fracture with pain along the sternum.

Although chest x-ray remains the most effective means of diagnosing rib fractures, approximately 25% do not show up on x-ray and are diagnosed by physical exam. Rib fractures are difficult because simple breathing causes pain. You can have bruising, muscle spasms over the ribs and possibly some crunching-type sounds when the rib is touched at the point of injury.

Treatment involves relieving pain while the fracture heals. Because of breathing, the ribs cannot be splinted like other bones. Most rib fractures heal in a few weeks (about six). Narcotics are given the first couple of weeks then milder analgesics such as Tylenol or ibuprofen are used.

## Treatment for rib fractures includes the following:

- Avoid strenuous activity but exercise as tolerated
- You may put an ice pack over the injured ribs for 20 to 30 minutes every 3 to 4 hours for 2 to 3 days
- Coughing will be painful. Deep breathing and coughing is necessary to prevent pneumonia (lung infection). Use a pillow to support the area while coughing
- You should continue to use the incentive spirometer at least 3 to 4 times a day
- Do not smoke
- You can expect to have pain over the injured ribs for several weeks, which will improve over time
- Try a non-steroidal anti-inflammatory such as ibuprofen for pain
- During the first few weeks after injury, you may require a prescription analgesics for pain relief
- Do not wear a rib belt



Call Our Office if:

- You have difficulty breathing
- You develop a fever over 101 F
- You have worsening pain
- You develop a cough that you cannot control
- You begin coughing up thick or colored material
- You begin to vomit or have abdominal pain
- You have questions or concerns

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