Managing a Rib Fracture

A Patient Guide
What is a rib fracture?
A rib fracture is a break of any of the bones that form the rib cage. There may be a single fracture of one or more ribs, or a rib may be broken into several pieces. Rib fractures are usually quite painful as the ribs have to move to allow for normal breathing.

What is a flail chest?
When three or more neighboring ribs are fractured in two or more places, a “flail chest” results. This creates an unstable section of chest wall that moves in the opposite direction to the rest of rib cage when you take a breath. For example, when you breathe in your rib cage rises out but the flail chest portion of the rib cage will actually fall in. This limits your ability to take effective deep breaths.

What are the signs and symptoms of a rib fracture?
• Pain with a breathing in or when some touches the area of the fracture
• Splinting
• Bruising
• A crackling feeling when you touch the area

If you can not breathe normally because of pain, you may:
• Feel short of breath
• Feel anxious, restless, or scared
• Have a headache
• Feel dizzy, tired, or sleepy

How is a fractured rib diagnosed?
Your doctor will ask questions about your injury and do a physical exam.
The doctor may:
• Push on your chest to find out where you are hurt.
• Watch you breathe and listen to your lungs to make sure air is moving in and out normally.
• Listen to your heart.
• Check your head, neck, spine, and belly to make sure there are no other injuries.
• You may need to have an X-ray or other imaging test; however, rib fractures do not always show up on X-rays. So you may be treated as though you have a fractured rib even if an X-ray doesn’t show any broken bones.

What is the treatment?
Treatment for rib fractures focuses on pain relief and clearing secretions from your lungs to prevent any further complications; such as, pneumonia or a collapse of part of the lung. Most rib fractures heal in six weeks.
**Types of Pain Control**

- **Analgesics (Pain killers):**
  - As prescribed by your doctor.

- **Ice/Heat:**
  - If you know it’s safe to apply ice to your body, icing should be performed no longer the 15 to 20 minutes in one area. You may repeat again after 60 minutes has passed, continuing this cycle of 15 to 20 minutes on and 60 minutes off as needed.
  - Do not apply the ice directly to your skin. Ensure that there is a layer between you and the ice.
  - Follow the same guidelines for heat.

- **Transcutaneous Electrical Nerve Stimulation (TENS):**
  - TENS has shown some evidence to help decrease pain associated with rib fractures.
  - TENS is a treatment offered by physiotherapists to help control pain by either blocking the pain message to the brain or by facilitating the release of endorphins.
  - To find a physiotherapist in your area go to [www.bcphysio.org](http://www.bcphysio.org) and follow the “Find a Physio” link.

**NOTE:** In the past it was common to tape or tightly wrap the injured rib area. But you should NOT do this, even if it eases your pain. It can keep you from taking deep breaths, and it could cause parts of your lung to collapse or could increase your risk for pneumonia.

**Deep Breathing Exercises**

By breathing deeply and using your lungs as fully as possible you will move the secretions and will be able to clear them more easily. Do a cycle of five to ten deep breaths every hour.

1. Start by placing your hands on your ribs and take a deep breath in through your nose, expanding your lower chest. You should feel your ribs push against your hands.
2. Breath out slowly through your mouth until all the air is gone.
3. For every other breath, hold your breath for three seconds. This will help keep the lungs fully open.

**Coughing**

Coughing is necessary to clear secretions from your lungs. This should be done after the breathing exercises described above or during if you feel the need.

1. In sitting, lean forward slightly and keep your feet on the floor. To make coughing more comfortable you may support the fracture area with you hands or a rolled up towel.
2. After your deep breaths, breathe in and cough out.
3. Repeat this cycle twice or for as long as you have sputum to clear.
Posture

Check your posture in a mirror to ensure that you are not assuming any abnormal positions. You want your fracture to heal in an anatomically correct position. Good posture will also help you to breathe more efficiently. Ideal posture is shown here:

1. When standing or sitting your ear, shoulder, and hip should line up comfortably.
2. Let pain be your guide. You may not be able to achieve this position initially because of pain, but work towards it. Stretching discomfort is okay, but do not cause yourself pain.

Activity and Exercise

It is important to get your rest when healing from a rib fracture; however, you do not want to remain completely inactive as this can have negative effects on many of your bodies systems. Make sure to get up and move as long as it’s not too discomforting. Remember, this is where good pain control helps to start you moving!

Moving will help prevent the negative effects of doing nothing which include, but are not limited to:

- development of a blood clot in your leg (deep vein thrombosis)
- increased risk of chest infections
- muscle weakness
- skin breakdown
- disorientation
- depression

When there is no pain at rest, you may begin to increase your activity level, but this should be done gradually.

It may take six weeks or longer to heal, do not resume your previous level of activity immediately. If problems such as shortness of breath, or pain continue to persist, consult your doctor.

Return to work or sport depends upon the activity involved and the level of pain. You may require doctor’s medical clearance before returning to some sports. It is better to limit activity for the short term to allow the ribs to heal well.