ANATOMY
Ribs articulate with the spine at two places. The costovertebral joint and costotransverse joint. Both can be viewed in this image.

SPRAIN INJURY
Similar to how you sprain your ankle, it swells up and is painful to walk on, you can sprain one or both of these rib joints. Even though it is a much smaller joint, these joints have an abundant nerve supply which means these injuries can be incredibly painful. This area is also very closely related to your sympathetic nervous system, so irritation from a rib sprain could potentially amplify your “fright-flight” reflex, which may make you feel symptoms such as anxiety, increased respiratory rate and heart rate, and increased sweating.

The main symptom of a rib sprain is anywhere from mild to severe pain in the upper back, usually slightly more on one side of the spine, which is sharp or stabbing in quality, and worse on deep inspiration (breathing in).

CAUSES
There can be many causes for the onset of a rib sprain, varying from sports activities, sleeping patterns, coughing or sneezing, twisting movements or heavy lifting, just to name a few.

TREATMENT
Treatment for a rib sprain is similar to any joint sprain.
Initially you want to use RICE (rest, ice, compression, elevation):

- It is important to **rest** from strenuous activities such as heavy lifting, or high impact exercise, to prevent your sprain from getting worse. However, keeping moving and continuing gentle activities will generally make you feel better, as it helps keep muscles warm, and improve blood flow.

- **Ice** should be applied locally to the area of sharp pain. Heat packs can help with local muscle spasm, however I always suggest to my patients that in the first 48 hours of an injury to stick with the ice. This should help limit the amount of inflammation building up in the area. With either ice or heat packs, always make sure there is something between your skin and the pack, such as a tea towel. I suggest using them for 10 minutes on, 10 minutes off, and repeating this as you feel needed. This should assist in improving blood flow to and from the local area.

- The ribcage may be a difficult area to **compress** and **elevate**, and it is important not to restrict your breathing at all, so don’t worry too much about these for this particular injury.

If you have no problems taking over the counter non-steroidal anti-inflammatories (eg: Ibuprofen, Diclofenac, Naprosyn) these may also help reduce the local inflammation and pain. Analgesics such as Paracetamol can also be used to temporarily reduce pain.

Osteopathic treatment for a rib sprain is aimed at improving the whole body function, in particular the thoracic cage (rib cage). Treatment is aimed at improving structure and alignment, function and movement, blood supply, nerve function, lymphatic drainage and decreasing any local muscle spasm. This in turn should help your body get on the right path to healing itself, and may give you some temporary relief from your symptoms in the meantime.

**PROGNOSIS**

Typical rib sprains are usually really painful for a few days to a week. Sometimes the pain will get worse on the second or third day. After this symptoms usually slowly reduce as your body heals but they can niggle or be annoying for a week or so. Your body should heal itself in time, however sometimes osteopathic treatment can help reduce some of the symptoms associated with these injuries, and help your body function as well as it can, so it can do it’s best to heal.

Generally rib sprains resolve in approximately 2-4 treatments, however as with any injury, this can vary depending on the severity of the sprain; also if there are any ongoing aggravating or maintaining factors, this may prolong resolution of your pain.

If you think you have sprained a rib and it’s not getting better on its own, please contact Valley Osteopathy for an appointment with your Osteopath.

**Picture credits:**