Chiropractic Care for COPD

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The Connection Between Better Lung Function and Spinal Nerves

The spine is an amazing feature of human anatomy; the vertebrae protect your spinal cord, spinal nerves emerge through a hole called the foramina in the vertebrae, and these nerves then innervate different parts of the body. The philosophy of chiropractic medicine is based on the theory that nerves may be compressed and it affects areas of the body that the nerves normally serve. Once the nerve compression is alleviated, nerves can heal and do what they are supposed to do, no matter what part of the body the nerves are affecting.

Breathing Easy

In a study, 87 Swedish chiropractors were surveyed on what types of symptoms were improved with their patients. Of the patients that received benefits, 26 percent reported that it was easier to breathe. The more areas of the spine that were treated, the more health improvements were reported (such as improved digestion, vision and circulation).

That’s good news — but it gets better.

In an Australian study of 15 patients with chronic obstructive pulmonary disease (COPD) of moderate severity, five received soft tissue therapy, five received soft tissue plus spinal manipulation, and the remaining five received soft tissue therapy, manipulation and exercise. Lung function was measured before and at the end of four weeks. Those in the group that received all three treatments had better lung capacity and walked longer distances. Those who received manipulations had less gasping for breath and no one in the study experienced any negative side effects.

Why It Works

What is it about chiropractic manipulation that improves symptoms of COPD? If the chest wall can’t move well, COPD will progress. Reducing this impairment improves the overall prognosis. Manipulation of the spine (and soft tissue therapy) increases the range of motion in the joints and decreases muscle spasticity. The end result is easier breathing and less work for the respiratory muscles to do in breathing. Overall there is less shortness of breath.

Chiropractic treatment more often than not involves spinal manipulation. Depending on the chiropractor, it may also include nutritional advice and/or therapeutic exercise.

Breathing is controlled by a breathing center in the brain stem. The nerve cells, called neurons, in the brain stem send signals to the diaphragm and muscles in between the ribs. Did you know the cervical nerve roots are also involved? The cervical nerve roots are the nerves that emanate from the spine, enter the foramen (or hole) in the spinal vertebrae and travel to the corresponding body parts.

What Parts of the Body Are Innervated by Spinal Nerves?

Here is a run down of what spinal nerves control what parts of the body:

- C1 and C2 cervical spinal nerves control the head.
- C3 and C4 control the diaphragm, the major muscle involved in breathing. This muscle allows your chest cavity to expand so you can take more air into your lungs. It works 24/7 whether you are awake or sleeping. Any injuries to the phrenic nerve can occur during surgery involving the neck or the chest but can also occur during epidural injections, as well as injuries during a fall, car accident, or work injury.
- C5 cervical spinal nerves control the deltoid muscles and the biceps muscles.
- C6 controls the muscles that extend the wrist and the biceps.
- C7 controls the triceps muscles.
- C8 spinal nerve roots control the hands.

Next page: guidelines for COPD and chiropractic care.

What Parts of the Body Are Innervated by Spinal Nerves?

You can see that if the nerves are compressed or injured, it will effect your breathing. If C3 and C4 nerve roots control breathing, and spinal manipulation decreases the compression on the cervical nerves, it makes sense that it would help. The longer a nerve is compressed, the more the damage becomes irreversible.

By decreasing the compression on a nerve, the area of the body that the nerve is pressing on will start to heal. When this is done repeatedly, the nerve can start to recover bit by bit. What that would mean to someone with COPD is that breathing function and abilities should improve.

6 Guidelines for Chiropractic Care of COPD

It may be worth trying chiropractic care to treat your COPD. When you do, here are a few guidelines:

1. Work with a chiropractor that manipulates the entire body, not only the upper cervical vertebrae.
2. Bring in as much of your medical record as possible on your first visit. The more your chiropractor understands about your condition, the more they will help you.
3. Ask your chiropractor about what lifestyle changes, if any, would be beneficial to you.
4. Discuss how long your initial trial should be before you start checking results. Ask about how to measure your results.
5. Remember that with time, your body will start improving. Some changes will be felt within the first few weeks, but you'll need to allow time for the benefits to accumulate.
6. Ask your chiropractor if there are things you can do at home to improve your COPD.

What Happened When a COPD Patient Received Chiropractic Treatment?

There's actually a case reported in medical journals of someone who was treated with chiropractic treatments and what happened to their COPD, which they had for over 20 years. The chiropractor used a combination of chiropractic manipulation, nutritional advice, traction of the spine and therapeutic exercises.

As a way of measuring to see whether improvement was made, the chiropractor measured forced vital capacity and forced expiratory volume in one second. This is the amount of air that could be used by the lungs was measured as well as how much air the patient could exhale. Both of these are good indicators of how well the lungs are functioning.

The chiropractor also measured the amount of coughing, patient fatigue, and the ease of breathing. There was an improvement in the coughing, forced vital capacity, forced expiratory volume in one second, fatigue and ease of

breathing.