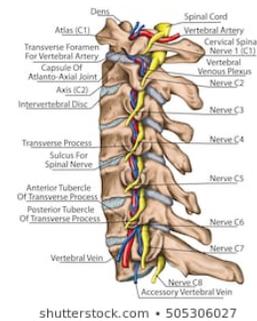


LOW BACK PAIN

Anatomy

Your spine consists of 7 cervical segments (neck), 12 thoracic segments (mid back), 5 lumbar segments (low back), and your sacrum (tail bone). Between all of these segments are intervertebral discs that help to disperse and absorb forces. Your spinal cord runs from your brain all the way down these spinal segments through a small canal. At each of these segments nerves branch off our spinal cord and extend to reach all areas of the body. Our spine is held together by series of ligaments and muscles that allow us to move in all directions but limit excessive motion.



What is the cause of low back pain

Any of the structures mentioned above can get injured and cause pain, but research is showing that it is less important to find what exact part is injured and more important to find out what movements help the back to feel better. We can classify the injuries into categories to best help improve any pain or symptoms.

Classifications

Directional preference

This means that your back and pain prefer to be in a certain position, either flexion or extension as seen below.



Pain that shoots down the leg is of particular importance in this category because typically one of these positions will help the pain and move it up the leg and closer to the back, and the other will increase the pain and send it further down the leg.

Once you find out which direction your back prefers you can perform a set of 10 in that direction using the exercises above and repeat this 3-6 times per day to help improve your pain.



Mobility

This category is for the person who always feels their back and legs are stiff. They typically have tight Hamstrings and feel their back is more achey after a period of inactivity. The pain felt is more centralized to the back and does not go down the leg beyond the knee. For this group motion is important because their back is not moving enough and causing pain. Performing 2-3 sets of 10 of the exercises to the right of this paragraph would be very beneficial.



Stability

This category is for the person that feels “unstable” and/or has multiple experiences of “throwing out their back”. The typical story for someone in this category is they experience a painful motion that can spark an intense episode of pain with gradual improvement over the next few days/weeks. This is typically a viscous cycle that then repeats week or months later. This sensation of throwing out your back is due to a brief moment of your muscles being overloaded and losing control. For this group of people working on the muscles that control the spine will help. Holding these positions for 15 seconds to 1 min for 3 sets will help strengthen the muscles that control your back.



You are not your MRI

It is common and normal to be curious what the cause of your pain is, but MRI may not be the answer. Recent research suggests that your results on an MRI and the level of pain you have may not be related. An example of this is a study that took MRIs of peoples backs that did not have any pain and they found 36% of people 20 years old and 96% of people at age 80 had disc degeneration. I remind you that these people were not in pain, and their has been more research published to support that just because you may have some findings on an MRI does not mean you also have to have pain and vice versa, just because you have pain does not mean that something will be wrong with your MRI. The moral of the story is that, most of the time, you will be able to improve your back pain despite having “serious” findings on an MRI.

