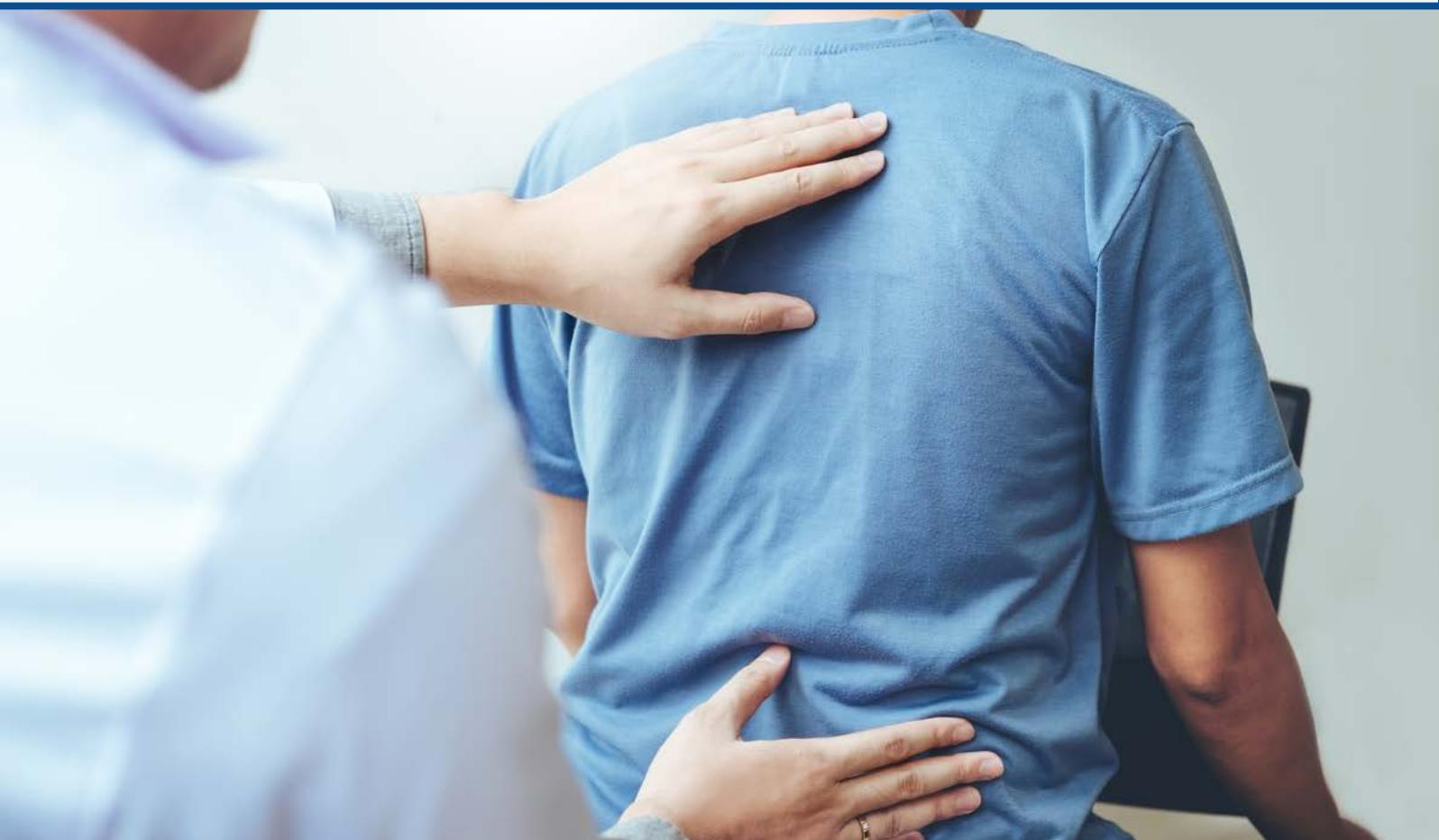


What Most People Don't Understand About Their Neck and Back Pain



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INTRODUCTION

Back and neck pain is extremely common, causing disability and costing our society billions of dollars in treatment and lost productivity costs per year.

Lower back pain is the number one cause of years lived with disability in the world. Neck pain is number four.

Patients search for answers. They get confused over what's wrong with them and what treatments will help. They start to think they need an x-ray, CT scan or MRI scan of their spine to "see what's wrong".

While scans are good for detecting serious causes of pain, these serious conditions actually make up less than 1% of all spinal pain. And many serious conditions may also be revealed in a good physical examination and blood tests.



"Life can only be understood backwards; but it must be lived forwards."

Kierkegaard





The Problem With X-Rays and Scans

Typical findings on x-rays and scans of the spine in anyone over 25 years old are:

- ▶ Disc degeneration
- ▶ Arthritis
- ▶ Bone spurs
- ▶ Stenosis (narrowing)
- ▶ Disc bulges and protrusions

These findings occur in both people with back pain and without back pain! Often, a person's x-ray or scan does not match their symptoms. Many people have advanced signs of disc deterioration and arthritis in their spine with minimal or no pain. People's pain can change from day to day, but their x-rays and scans do not. Most of the findings on your x-ray and scans have taken years to develop, like looking back on history, but may have little bearing on your pain today.

Scans show your anatomy, not your pain. Your anatomy naturally changes over time. You can see it on the outside by looking in a mirror, and it's happening on the inside too. It's a normal part of life. Does your face hurt from the wrinkles that have developed over the years? Ageing is not always painful.

A recent study found that having a CT or MRI scan of your spine may actually increase the chance of you having a worse outcome, forgoing valuable treatment and rehab time as you wait for your specialist appointment that is often disappointing to most patients. Surgery is rarely the answer.

Pain is a very complex process involving your spine, nervous system and brain. You can't take a picture of pain. At least not yet.

What's The Most Overlooked Issue?

You're weak.

Specifically, your small spinal stabilizing muscles are weak.

Studies repeatedly show that in up to 95% of MRI scans, chronic whiplash, neck pain and back pain is accompanied by profound changes in the multifidus muscle, a major stabilizer located between each vertebra. MRI scans do show fatty infiltration of the multifidus and other stabilizing muscles, a sign of muscle degeneration, but unfortunately this is not usually mentioned in your scan report. Yet it's probably the most important finding and the one thing you can do something about. If it's present in up to 95% of people with chronic whiplash, neck pain and back pain, you really don't need a scan to see if you have it too.





Load-Capacity-Pain

There's a concept we discuss at Edgemont Chiropractic Clinic called "Load-Capacity-Pain". If your load (activity) exceeds your capacity (strength), then pain may result. It may be injury, or it may just be your sensitized nervous system on the lookout for possible injury threat and giving you a warning sign.

Your nervous system can become sensitized from your previous episodes of back and neck pain. Pain is an alarm bell; it does not always mean there's been tissue injury or damage.

For many people, just sitting all day is putting more load on their back that it can tolerate, and that creates pain and muscle tightness. Your brain is yelling at you to get up and get moving.

For others, it's doing their 1-2-hour walks on the weekends. For some, it's standing in the kitchen or walking slowly that overloads their muscle capacity. Standing and slow walking place more compressive load on the spine than brisk walking.

You could change your load (do less), or better still, increase your capacity!

Increase Your Capacity.

A basic principle of the human body is that physical stress causes adaptation. So let's get started.

Find an activity you like to do. It could be walking, gardening, tennis, golf, or some other activity. Do it for 30 minutes at least three times per week.

Any exercise or activity will usually do but tell us your exercise program so we can be sure there are not activities that may be stressful for your spine. We may also give you some exercises specific to your problem.

You also need at least one hour of strength training twice a week. Not a day of back exercises, a day of chest exercises, a day of arms and legs exercise. It's your whole body that needs integrated functional strength training.

You need rest days too. Muscles get stronger the day after your activity. Give them some time.



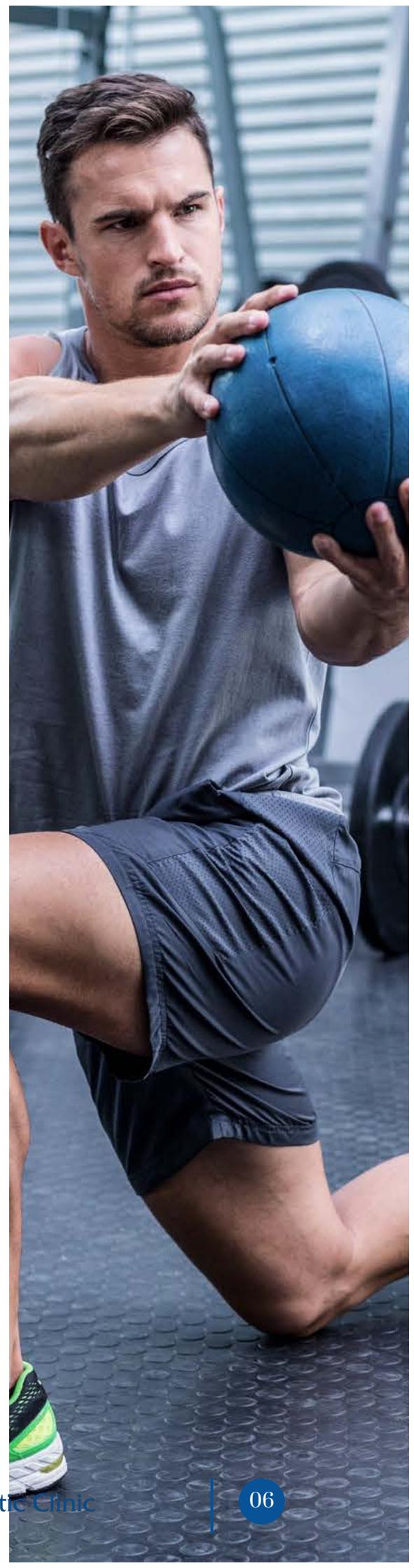
Functional Strength Training.

We also call this farm boy / farm girl strength. Whole body strength. Your exercise program should include these functional and fundamental movement patterns: (And you don't need to lift a ton to do it!).

- ▶ Squatting
- ▶ Lunging
- ▶ Hip hinging
- ▶ Pushing
- ▶ Pulling
- ▶ Loaded carries
- ▶ Diaphragmatic breathing
- ▶ A few specific back/neck exercises as required

These are the movements you will use in your daily life. You don't use a bench press or leg press motion too often in daily life. Don't do sit-ups and crunches, they are not functional movements and are potentially harmful to your back.

If you are getting older, you are losing muscle at an increasing rate year by year. You must do some strength training. You can't stop getting older, but you can stop yourself from becoming frail. Research shows that 20-30 years of muscle wasting can be reversed in 2-3 months of supervised weight training.



You can limit all that time you're spending training your core. It's important but also over-rated. Learn how to breathe properly to activate your core. Your diaphragm is one of your most important and underutilized core muscles. Learn how to turn on your core, then how to turn off your core. That's what makes top athletes. Same goes for many stretches – over-rated and can actually increase your pain later in the day.

Overdoing core exercises and overdoing stretches may also be part of your problem.

What you do need is mobility in some joints– full and easy joint movements. You also need stability – strong muscle control around other joints.

These joints need to be strong and stable:

- ① Feet
- ② Knees
- ③ Lower back
- ④ Neck

These joints need to be flexible and mobile:

- ① Ankles
- ② Hips
- ③ Mid back
- ④ Shoulders

An additional benefit of strength training: Strength training is superior to aerobic exercise in providing some protection from cognitive decline associated with aging.

Getting a good sleep is vital. Sleep helps the body heal and decreases our sensitivity to pain by lowering inflammation levels and helping the repair process in muscles and in the brain. Sleep also helps with emotional stress that can amplify pain signals.

Should You Exercise When You Have Pain?

Sometimes when we exercise, we hurt. But pain is a complex process that can't be relied on to help us decide if we've actually done any additional injury. Here's our Exercise Stoplight Guide to help you decide if you can carry on with your activity, slow it down or stop.

Stop if your pain increases and there is a 50% or more loss of flexibility after your activity.



Proceed with caution if your pain increases and persists after your activity, but there is no loss of flexibility. Reduce the frequency, duration or repetitions of your activity.

Keep going if your pain increases but there is no loss of flexibility after the activity, and the pain decreases to baseline shortly after the activity.



CONCLUSION

It's generally safe to move and exercise with back and neck pain. All exercise seems to help, but there are certain principles of movement that should be followed. Specific exercises unique to your problem often need to be added to an exercise program, and some exercises may need to be taken away. Don't forget about your stress, mood and poor sleep, they play a big role in "turning up the volume" of your pain.

Even if you are fit and strong, there's a high probability of weakness in your spine.

Finally, degeneration of your discs and arthritis in your spine is not just "wear and tear". It may be because you haven't had enough "wear and repair" in your lifetime. Physical stress and loads on the body causes healthy adaptation. Osteoarthritis may in fact be a problem with a poor repair process.

Sedentary people get just as much and often more disc degeneration and osteo-arthritis than active people.

Load (activity), when appropriately applied, stimulates bone, disc, nerve, and muscle cells to produce healthy strong tissues and a strong back and neck.

IT'S NEVER TOO LATE TO START.

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