

Engage Physical Therapy and Wellness Back Pain E-Book

Myths and Facts about Back Pain and How to Manage It

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Some information that might help you consider back pain a little differently. Why this is so important is that low back pain (LBP) is the leading cause of disability, often associated with costly ineffective and sometimes harmful care. We can dramatically reduce the incidence of over medicalizing low back pain by changing our understanding, and the narrative of the why and how of LBP.



Myth # 1- Back Pain is Rare and Serious--

Fact #1-Back pain is a very common occurrence, and is rarely serious

80-90% of the population will experience back pain at least once in their lifetime. 90% of all low back pain is what we call "non-specific low back pain". It means that the reason someone is having back pain is more complex and multi-factorial that we cannot say with certainty the cause. It does not mean nothing is going on, it simply means many things can be contributing. Examples include poor metabolic health, poor sleep, anxiety and depression, previous experience and beliefs, change in activity levels and many more..

The incidence of very serious types of pathology like a compression fracture is 4 %. The incidence of spinal stenosis is 3 %. Even these pathologies are sometimes without symptoms or signs to be concerned about and can be managed conservatively. While it can often feel severe and scary, back pain typically resolves on its own within 6-8 weeks with mild activity modification. Trying to go about most of your daily activities after a brief period of modification is recommended. Trying not to worry too much about the back pain and staying positive can also be helpful. That said, persistent back pain can be very distressing and is hard to manage on your own, but it is rarely disabling or life threatening.

If your pain persists, it might be worth seeking out the guidance of a physical therapist that understands the science around pain, to help you get back to moving well and doing all the things that are important to you.

Myth # 2 - Back Pain requires immediate medical attention i.e. scans are always needed to detect the reason for LBP-

Fact # 2 With first time, or recurrent back pain, seeking care at an emergency department, or getting an x-ray or MRI to determine what's wrong is not always necessary.

Current guidelines suggest that for first time back pain, we do not need an x-ray or MRI Imaging. The American Academy of Family Physicians says do not do x-rays or MRIs on first time LBP. Imaging findings don't often tell us what's causing our pain, as only a very small percentage of people have findings that are indicative of rare and serious problems. Yet, these imaging findings are driving decisions around injections, medicine use and surgery, all of which carry risks and varied benefits. Don't rush to over treatment. Often a simple, sensible approach is best. Even some of our previous red flags for referral to a physician have come under criticism and need to be evaluated carefully. Speaking to a healthcare provider that is well skilled in assessing the symptoms in the context of what you are experiencing will be most helpful in making the decision for further medical assessment.

Myth # 3 Persistent LBP is always related to tissue damage

Fact # 3 Persistent back pain is rarely associated with serious tissue damage.

Traditionally many things have been ascribed to be a reason for LBP like disc degeneration, bony changes to the joint, canal space narrowing and disc herniation. Most research shows that this is not so clear cut. There is not an absolute relationship between these findings and back pain, and are present in many people that do not have symptoms. There may be other reasons that we have pain persisting. These can include reversible changes to the nervous system, learned behaviours and immune and endocrine changes, chronic inflammation, and other various factors.

While imaging findings can detect some very serious problems, for most people imaging findings reveal "normal abnormalities" or common things that happen with time. These can include bulging discs, and other "degenerative" findings. In a landmark study published in the New England Journal of Medicine in 1994, over 50 % of individuals **without back pain** had at least 1 bulging disc and other abnormalities. 80% of pain free people have disc degeneration so we have to be careful to ascribe this and other things to causing pain. Physical Therapists call them a "wrinkle on the inside". We don't freak out about wrinkles as a serious problem and should not always be overly concerned about certain imaging findings. And in a recent study, it was demonstrated that disc herniation will often resolve on its own. There are certainly exceptions, and a good clinical exam by a physical therapist can sort out why you might be having pain and how to manage it, and if you will need a referral to a physician for further assessment.

Myth # 4- Your Back can "Go out of Place"

Fact #4- A vertebrae going out of place has never been demonstrated on scans

We have to be careful about outdated terms like "slipped disc, or a vertebrae that's "out of place". Most of these scenarios have never been shown to happen on imaging and cannot be demonstrated on a physical exam. One exception is the phenomenon of spondylolisthesis where a vertebrae appears shifted forward on top of another vertebrae on imaging. There can be an association between spondylolisthesis and radiating leg symptoms that may require some additional attention, but a more recent study published in Spine 2017, demonstrated no association with spondylolisthesis alone and low back pain. While it is suggested that manual therapy techniques and adjustments are done to put discs and joints back in place, spondylolisthesis is not reversible, and we may not really be moving specific structures. Manual therapy can have some short term benefits, but pain relief and improved movement are likely happening by another mechanism when it comes to manual therapy. Physical therapists like to use manual therapy to help you get moving better and to reduce pain.

Myth # 5- Pain related to exercise and various movements is always a warning that you are harming your spine and a signal to stop or modify activity

Fact # 5- Pain with movement or exercise does not mean you are harming your back or doing more damage.

While movements can elicit pain, it does not mean we need to stop them forever, or that they will create damage or further injury. Pain with stretch, load or pressure in an area is often present due to increased sensitivity in the tissues. With many activities that are painful, we might need to change how often, how hard, or the way in which we do them, until our tissues can adjust to these motions. However most motions are not unsafe and we should be able to confidently get back to doing them with appropriate guidance and time. Again the Guidelines from the American College of Physicians for back pain management suggest patients should select non pharmacological management for acute (new onset) or subacute, (past the 6 week mark but before the 3-4 month mark) and use things like heat, massage, spinal manipulation and gentle exercises during physical therapy. If pharmacological treatment is desired, non-steroidal antiinflammatories and muscle relaxants are recommended. For chronic low back pain, patients and clinicians should select non pharmacological treatment and use a multidisciplinary treatment approach including stress reduction techniques, exercise of various forms that can include tai chi or yoga or other types of exercise. Regardless of the type of activity physical therapists subscribe to a graded exposure approach, meaning working to guide your progression to fit you and your goals, and to use pain science principles to give you sound advice. Staying positive, and trying to reframe that pain as less threatening early on, may help to improve confidence in moving more without fear. In addition outcomes tend to be worse, or recovery delayed if you take too much time off work, or your usual activities. Movement, activity and exercise all aid in recovery.

Myth # 6- Bad Posture Causes Back Pain-

Fact # 6 - Back pain is not caused by "poor posture"

While it might be an intuitive and an easy way to explain back pain, there is not good evidence that certain postures lead to back pain. Several studies have compared rounded slouching postures in teenagers, and changes in posture during pregnancy and tracked them over time. These studies showed that the folks with postural asymmetries, short term postural changes, or postures considered to be "poor postures", were no more likely to develop back pain. We know in fact that there are many other factors more likely to contribute to an increased incidence of back pain. That said, if you have back pain, being in certain sustained postures can be uncomfortable or lead temporarily to increased pain. Chemical changes occur when you are sitting or standing for prolonged periods because of decreased oxygen perfusion to tissues. This alerts sensors in your tissues and can create pain. Again, changing positions more frequently, or moving more often are strategies for

pain reduction. Instead of focusing on posture, I like to focus on movement. Your best posture is your next posture.

Myth # 7- Core Stabilization is the Cure to Low Back Pain Management

Fact #7 - Back pain is not caused by a "weak core"

Core strengthening has become very popularized through fitness and health professionals alike. But is the evidence really there around having good core strength and avoiding back pain? Not really. Having good core strength has not been a good predictor of avoiding future back pain. Additionally studies have shown that general exercise works just as well as specific core strengthening for managing back pain. And, some researchers are suggesting that constant engagement of spinal muscles might be driving back pain in chronic conditions. Learning to relax muscles can be more effective initially. A recent review of 22 high quality studies concluded that there is strong evidence that stabilization exercises are no more effective than any other form of active exercise in the long term.

Myth # 8 Repeated Spinal Loading results in Wear and tear and Tissue Injury

Fact # 8 Backs do not wear out with everyday loading activity

Like all other tissues we have to gradually expose our body tissues to stresses to keep it healthy. The body is not a machine and functions under the SAID principle- Specific Adaptations to Imposed Demands.

Building physical and emotional resilience, as well as confidence will be different for everyone. Most people feel back pain is more threatening than other types of pain, and that our back is more fragile than other parts of our body. In fact, our backs can be as resilient and strong as other areas of our body, and recover the same way. Again, how we go about this is key, and will be different for everyone.

Rest is Rust. Motion is Lotion.

Myth #9 - Pain Flare Ups are a Sign of Tissue Damage and Require Rest

Fact # 9- Pain Flare Ups DO NOT mean you are damaging yourself

Acutely after a first time incidence or recurrence of increased back pain, our brain sends out pain to protect us. It tells us we need to modify our activity. But as tissues settle down, and heal, the body may start over protecting us. Pain flares are much more likely to

occur secondarily to poor sleep, nutrition and other stressors, especially in back pain that has gone on for a while or becomes chronic. Chronic back pain is defined as pain persisting for 3 months or more. Persistent pain is not always explained as coming from certain tissues, especially after they have healed, but often is related to multiple factors. Persistent or chronic pain is complex but can be managed with the help of a clinician familiar with these principles.

Developing a more robust resilient body through recovery strategies allows for quicker recovery from pain flares or reduced numbers of pain flares.

Myth # 10- LBP will become persistent later in life-

Fact # 10 - getting older is not a cause of back pain.

Research does not support this. The highest incidence is often in the late 30s and early 40s. After that the incidence goes down until the late 60s, with another spike later in life, likely related to a decline in activity level. The Sandwich generation potentially are caring for children and parents, possibly working long hours with limited time for enough sleep and activity. Maybe these days they are sitting a lot for our jobs. Maybe they are weekend warriors. This will vary from person to person and we cannot generalize this to everyone but might explain what we see in terms of the highest incidence age of LBP.

Myth # 11 Treatments such as strong medications, injections and surgery are effective and necessary to treat LBP

Fact # 11 Injections, surgery and strong drugs are not usually the long term cure or helpful choices

Injections, surgery and medications like opiods have not been shown to be helpful in the long term for persistent back pain and they come with very real and significant risks and potential side effects. The Journal of Spine published a review on the accuracy of tests for patient selection for surgery, and concluded that no subset of patients with chronic low back pain could be identified in which spinal fusion surgery is predictably effective. 75 % of people who undergo spinal fusion surgery are no better and often benefits are marginal. Statistics show that 50 % of people with spinal fusion will undergo another fusion. What about our opioid epidemic. There is no valid evidence that they are effective. Opioids can actually impair mental clarity and immune function, and sometimes can lead to a phenomenon called opioid induced hyperalgesia which will actually make pain worse.

Tips for Managing Back Pain

- 1. **Modify your activity level short term** Pain is a normal experience and serves to protect us in the short term with an acute or recent injury, strain or pain onset. With a new onset of pain, modify your activity to let things calm down, and then slowly try to build up to your previous or improved activity level. Bedrest is not recommended. Trying to go about your usual activities and getting back to work as soon as possible improves outcomes.
- 2. **Stay Positive** It is normal for pain to affect your wellbeing, and emotional as well as physical state. Try not to avoid social outings and use your peer and family support to stay positive.
- 3. **Pace Yourself** in trying to increase your activity level, know that some pain may be part of the journey. If pain resolves by the next day and does not get higher than a 4-5/10 on a pain scale, it's a green light to continue trying to keep up your activity level. While its ok to take days off here and there, try to do a little activity each day, and a little more every few days. Exercise can take many forms. We know general exercise helps back pain as much as specific exercise. Find something you enjoy and makes you eventually feel good even if the journey is a challenge. You may not always feel good.

Activity while good, is random and inconsistent. Exercise is consistent and progressive.

Try to build a little at a time. Use activities that build your capacity or improve tolerance to lifting, pushing, pulling and other everyday activities.

- 4. **Stress reduction**, **relaxation and good sleep affects your pain** we know sleeping well and coping well helps with recovery and tends to improve pain thresholds.
- 5. **Seek help if you get stuck** Don't be afraid to ask for help from someone you trust. A Physical therapist is very well equipped to guide you through the partnership of getting better together.