

The Good News and Bad if You Suffer From Back Pain

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STORY AT-A-GLANCE

- › Back pain is one of the most common health complaints across the globe, with an estimated 80% of people experiencing back pain at some point in their life. It's also the No. 1 cause of job disability
- › According to a recent systematic review and meta-analysis, a majority of people who experience back pain do recover, even if the pain persists for a couple of months. The bad news is that the longer the pain persists, the lower your chances of a full recovery
- › In practical terms this means that if pain persists after an injury has healed, you need to switch up your treatment strategy. Once the injury has healed, ongoing pain is typically due to pain system hypersensitivity, and that requires an approach that includes retraining your brain to perceive pain appropriately
- › Avoid opioids, as they tend to augment pain sensitivity. Research has also shown opioids (including morphine, Vicodin, oxycodone and fentanyl) fail to control moderate to severe pain any better than over-the-counter (OTC) drugs such as acetaminophen, ibuprofen and naproxen
- › Pain Reprocessing Therapy (PRT) has been shown to successfully reverse chronic back pain by rewiring neural pathways so that your brain can respond to signals more appropriately. The goal is to reduce your fear of movements associated with pain, so that when you move, you can be confident that it's not going to hurt. Several other treatment strategies are also reviewed

Back pain is one of the most common health complaints across the globe, with an estimated 80% of people experiencing back pain at some point in their life.¹ It's also the

No. 1 cause of job disability.² The University of South Australia now has both good and bad news for back pain sufferers.

The good news is that a majority of people who experience back pain do recover, even if the pain persists for a couple of months. The bad news is that the longer the pain persists, the lower your chances of a full recovery. These are the take-away's from a systematic review and meta-analysis carried out by the University of South Australia. As noted by the authors:³

“For the acute pain cohort, the estimated mean pain score with inception time uncorrected was 56 at baseline, 26 at 6 weeks, 22 at 26 weeks and 21 at 52 weeks (moderate-certainty evidence).

For the subacute pain cohort, the mean pain score was 63 at baseline, 29 at 6 weeks, 29 at 26 weeks and 31 at 52 weeks (moderate-certainty evidence). For the persistent pain cohort, the mean pain score was 56 at baseline, 48 at 6 weeks, 43 at 26 weeks and 40 at 52 weeks (very low-certainty evidence) ...

Participants with acute and subacute low back pain had substantial improvements in levels of pain and disability within the first 6 weeks ... however, participants with persistent low back pain had high levels of pain and disability with minimal improvements over time ...

Identifying and escalating care in individuals with subacute low back pain who are recovering slowly could be a focus of intervention to reduce the likelihood of transition into persistent low back pain.”

Pain and Emotional Processing Can Get Cross-Wired

In practical terms, what this means is that if pain persists after your back injury has healed, you need to switch treatment strategies. At that point the pain is probably due to pain system hypersensitivity, and that requires an approach that includes retraining your brain to perceive pain appropriately. As explained in the Harvard Health blog:⁴

“... it's not just pre-existing attitudes that worsen back pain. The pain itself can rewire your brain. When pain first occurs, it impacts your pain-sensitivity brain circuits. But when pain lasts, the related brain activity switches away from the 'pain' circuits to circuits that process emotions. That's why emotions like anxiety often take center stage in chronic back pain.”

Managing Pain System Hypersensitivity

Australia's Department of Health addresses the issue of pain system hypersensitivity, also referred to as “central sensitization”:⁵

“In people with persistent pain, central sensitization means the alarm 'keeps on ringing' and that pain 'memories' can persist long after the original cause of the pain has healed. People experiencing persistent pain can experience a memory or 'echo' of their original pain.

This explains why people can experience pain when an x-ray or scan looks 'normal' ... persistent pain is best thought of as a glitch in the 'software program' that processes danger signals in the body and which the brain interprets as pain.

Sometimes this happens along with memory of the original injury or event that caused pain, and these memories become intertwined. For example, you might experience fear and pain with a certain movement.

The good news is that pain management can use helpful neuroplasticity to help reprogram the way the nervous system responds to danger signals and how the brain interprets this as pain. The aim of pain treatments is to reduce central sensitization, decrease pain, favor normal movement and daily activity and restore well-being.

Examples of using this plasticity in treatments for persistent pain include using 'mirror therapy' to treat phantom leg pain ... using mindfulness-based stress

reduction (meditation or yoga) to help manage fibromyalgia or re-educating movement without the association of fear.

Pain management is all about using helpful neuroplasticity to reprogram and reduce the overactive danger signals in the brain and nervous system. What each individual needs for helpful reprogramming may be different and researchers are currently exploring new treatments using plasticity.”

To address this kind of hypersensitivity to pain, the Australian Health Department recommends:⁶

1. Learning ways to manage your stress
2. Doing things that reduce your focus on pain
3. Physical movement and exercise done in a sensible and “paced” way
4. Finding new creative hobbies or practices (like photography or meditation) to help calm your nervous system and make new non-painful nervous system connections
5. Avoiding opioids, as they tend to augment and worsen pain sensitivity

Avoid Opioids

The recommendation to avoid opioids is an important one, as back pain is one of the most common reasons for **opioid dependence**, the side effects of which can be lethal. In fact, opioids are now the leading cause of death among Americans under the age of 50.⁷

According to a 2018 study,^{8,9} opioids — which modulate your brain’s reaction to pain — are the most commonly prescribed medications for people with chronic low back pain. These drugs often end up being used long-term in this population, and research suggests about 20% of patients on long-term opioid therapy end up developing an opioid use disorder.¹⁰ Up to 25% of opioid users also end up with other substance-abuse disorders,¹¹ which have additional risks.

The use of opioids for back pain flies in the face of guidelines¹² from the American College of Physicians, which recommends heat wraps and exercise as a first line of treatment, stressing that prescription drugs should only be used as a last resort, as they completely fail to treat the underlying problem.

Research¹³ has also shown opioids (including morphine, Vicodin, oxycodone and fentanyl) fail to control moderate to severe pain any better than over-the-counter (OTC) drugs such as acetaminophen, ibuprofen and naproxen. In fact, those taking nonopioid pain relievers actually fared “significantly better” in terms of pain intensity.

Considering the immense risks associated with opioid use, you’d be wise to exhaust all other alternatives before jumping on that bandwagon to disaster. The good news is there are a wide variety of non-drug options available.

Pain Reprocessing Therapy

One therapy shown to successfully reverse chronic back pain by retraining your brain is called Pain Reprocessing Therapy (PRT).^{14,15} This pain re-education therapy helps rewire neural pathways so that your brain can respond to signals more appropriately.

The goal is to reduce your fear of movements associated with pain, so that when you move, you can be confident that it’s not going to hurt. The short video above explains how PRT works.

In a clinical study cited in the video, 98% of patients reported improvement in their pain and 66% were nearly pain-free after eight weeks, and these improvements were confirmed by brain imaging. You can learn more about this novel therapy by visiting painreprocessingtherapy.com.

Addressing the Emotional Root of Back Pain

The success of PRT helps explain the remarkable benefits of the late Dr. John Sarno’s mind-body techniques. Sarno believed most chronic back pain was rooted in

psychological or emotional issues.

His specialty was treating patients who had already had surgery for low back pain and did not get any relief. This is a tough group of patients, yet he claimed to have a greater than 80% success rate using techniques like the Emotional Freedom Techniques (EFT).

“When negative emotions are suppressed, your brain redirects the emotional impulses to restrict blood flow to certain parts of your body, such as your back, neck or shoulders, thereby triggering pain. This pain acts as a distraction from the anger, fear or rage you don’t want to feel or think about.”

As noted by Sarno in the documentary “All the Rage” – a four-minute trailer of which is included above – “I tell [my patient] what’s going on, and lo and behold, it stops hurting.” The “what” that is going on is not a physical problem at all, it’s emotions: anger, fear, frustration, rage.

When these kinds of emotions are suppressed, your brain redirects the emotional impulses to restrict blood flow to certain parts of your body, such as your back, neck or shoulders, thereby triggering pain. This pain acts as a distraction from the anger, fear or rage you don’t want to feel or think about.

The pain essentially acts as a lid, keeping unwanted emotions from erupting. You may feel anger at the pain, but you won’t have to face the fact that you’re actually angry at your spouse, your children or your best friend, or that you hate your job, or the fact that you feel taken advantage of.

As noted by Sarno, working hard and constantly trying to do everything perfectly to keep everybody around you happy, “is enraging to the unconscious mind.” The term Sarno coined for this psychosomatic pain condition is “tension myoneural syndrome,”¹⁶ and he

firmly believed most people can overcome their pain by acknowledging its psychological roots.

Another doctor who believes resolving suppressed emotions is key for those with chronic back pain is Dr. David Hanscom, an orthopedic surgeon. He prescribes expressive writing as a primary treatment tool for back pain. You can learn more about this on Hanscom's website, backincontrol.com.¹⁷

The Importance of Staying Active and Minimizing Sitting

Getting back to normal activity levels is an important part of recovery. If it's true that most pain (barring an acute injury) is "in your head," then the longer you "baby" yourself and avoid physical activity for fear of it hurting, the more you're programming your brain to expect pain.

Staying active and minimizing sitting will also lower your risk of developing back pain in the first place by improving muscle strength and coordination, reducing stiffness and improving blood flow.

Oftentimes, back pain originates from tension and muscular imbalances. For example, sitting for long periods of time ends up shortening the iliacus, psoas and quadratus lumborum muscles that connect from your lumbar region to the top of your femur and pelvis.

When these muscles are chronically short, it can cause severe pain when you stand up as they will effectively pull your lower back (lumbar) forward. By bringing these muscles into better balance, you will remedy many of these common pains and discomforts.

This was certainly true for me when I had debilitating back pain about 10 years ago that failed to respond to all interventions. The only thing that worked was to radically reduce sitting. I switched to a standing desk and the problem permanently resolved.

Overuse and misuse of the muscles supporting your spine, poor muscle strength and inappropriate posture while sitting, standing and walking are other common causes of

low back pain. For instance, when walking with your toes pointed outward, the muscles in your hips and lower back tighten, increasing your risk for lower back pain.

Sitting with your shoulders hunched over a computer screen stretches muscles in your upper back and places added stress on your lower back, increasing your risk for both lower and upper back pain.

Walking with your head down is yet another posture-related problem that has repercussions on the rest of your back and hips,¹⁸ as your head is the single heaviest part of your body and will throw everything out of alignment. If poor posture is a culprit, consider doing some exercises to stretch out your shoulders, open up your hip flexors and lift your chest.

Three Ways to Address Improper Body Mechanics

Techniques that can ease or erase back pain by teaching you proper body mechanics include:

- **Foundation Training**,¹⁹ which helps strengthen your core. This includes anything that directly connects to your pelvis, whether above or below it. Foundation Training teaches all those muscles to work together through integrated chains of movement, which is how your body is structurally designed to move.
- **Compression breathing** — This breathing technique, which is part of Foundation Training, helps re-educate the muscles surrounding the spine of your rib cage, teaching them to be in a state of expansion rather than contraction. The technique is demonstrated in the video above.

Done properly, it will help lengthen your hip flexors, stabilize your spine and support your core using transverse abdominal muscles. This strengthens your back and keeps your chest high and open, all of which can reduce pain. Over time, your muscles will get stronger and your seated posture will improve.

- **Neurostructural integration technique (NST)**, a gentle, noninvasive technique that stimulates your body's reflexes. Simple movements are done across muscles, nerves and connective tissue, which helps your neuromuscular system to reset all related tension levels, promoting natural healing.

To learn more, you can download Michael Nixon-Livy's free ebook,²⁰ "Neurostructural Integration Technique: A Better Way to Good Health" from nsthealth.com. Basic training videos are also available on Vimeo.²¹ To find an NST therapist near you, see our [NST Therapists Page](#).

Benefits of Chiropractic Care

Spinal adjustment by a chiropractor can also ease back pain in many cases. In one 2017 meta-analysis²² of 26 studies, spinal manipulation was associated with "statistically significant benefits in both pain and function, of on average modest magnitude, at up to six weeks."

The average patient reported greater ease and comfort in their day-to-day activities, such as walking, sleeping or turning in bed. However, while these results appear to be modest in nature, it is important to recognize the results are an average, and that the participants only underwent manipulation. In other words, they were not given any additional rehabilitative exercises designed to maintain functional movement of the spine gained after manipulation, or to reduce inflammation.

A study^{23,24} that did take physical therapy and/or anti-inflammatories into account, published in 2018, found this kind of multidisciplinary approach reduced discomfort and disability to a greater degree than standard medical care.

In all, 750 active duty military service members already being treated for lower back pain were evaluated. All were receiving physical therapy and/or drugs to ease pain and inflammation. The team added chiropractic treatment to half the participants, including spinal manipulation, rehabilitation exercises and treatment with cold or heat.

On average, the chiropractic treatment group received two to five treatments over a six-week period. After six weeks, patients who received chiropractic treatments experienced greater improvements in their lower back pain and less disability than those who did not receive the treatments. Lead study author and chiropractor Christine Goertz, Ph.D., commented on the results:²⁵

“Spinal manipulation (often referred to as Hias chiropractic adjustment) may help heal tissues in your body that form as a result of injury, decreasing pain and improving your body's ability to move correctly.

It is also possible that manipulation impacts the way your body perceives pain through either the brain or spinal cord and or decreases pain from muscle strain, inflammation and or spasm in the muscles next to your spine.”

Aside from addressing any immediate spinal misalignment that might cause back pain, chiropractic care can also help address, prevent and treat deeper dysfunctions in your body. Chiropractic adjustments can actually affect the chemistry of biological processes on a cellular level, thereby reducing oxidative stress and improving immune function and DNA repair,²⁶ for example.

Acupuncture and Massage

Acupuncture and massage also have their place, and often work well together. As explained by the WellBridge Clinic in Oregon, which is a proponent of acupuncture for back pain:²⁷

“There is extensive, conclusive research behind the use of acupuncture for pain resolution and management, especially for back pain. Modern science has found that targeting specific points in the body with acupuncture pins acts as a nociceptive stimulation that leads to the activation of the nerve-endocrine-immune systems.

This activation helps the body to begin to heal at the sites of injury and pain. Effectively, this means it increases blood flow and circulation to injured areas. It

changes the electrical current that is the foundation of our biology. That's how acupuncture releases endorphins to ease pain, release muscle tension, and change cellular processes so the body can heal."

Back problems that may respond well to acupuncture include:

- Pinched nerves
- Sciatica
- Herniated discs
- Spinal stenosis

Massage therapy, meanwhile, releases endorphins that help induce relaxation, relieve pain and reduce levels of stress chemicals such as cortisol and noradrenaline. It also reverses the damaging effects of stress by slowing your heart rate, respiration and metabolism, and lowering high blood pressure.

Simple Stretches to Help Relieve Lower Back Pain

Stretching is also important, as tight and stiff muscles and lack of flexibility will contribute to back pain. There are many options here. Below, I've highlighted five simple stretches commonly recommended for lower back pain.²⁸ If these stretches are too painful to perform, stop doing them and consult your doctor, chiropractor or massage therapist before continuing.

- **Baby cobra** – Lie on your stomach with your legs together, arms bent and palms on the ground at chest level, elbows bent. Inhale and lift your chest, keeping the back of your neck long and your chin relaxed. Exhale and return your forehead to the mat. Repeat a few times, focusing on your breath.
- **Bird dog** – Begin on all fours, then lift and extend one leg and the opposite arm at the same time. Hold for three to five breaths. Switch sides and raise and hold the opposite arm and leg for three to five breaths.

- **Cat/cow** — Begin on all fours. Place your hands directly under your shoulders and your knees under your hips. On your inhalation, drop your belly and lift your gaze up to the ceiling. When you exhale, round your spine so your tailbone drops between your thighs and your head lifts between your arms. Repeat multiple times, slowly, to gently increase spinal mobility.
- **Psoas lunges** — Your psoas muscle extends from your lowest vertebrae to the top of your thigh, putting it in a good position to stress your lower back when it becomes tight. A great way to stretch your psoas is through lunges.

Begin by standing on your knees. Bring your right leg in front of you so that your right foot is on the floor and your knee is bent at a 90-degree angle. Tuck your buttocks slightly and place your hands on your right knee, or your hips. Allow your hips to gently shift forward as you breathe for three to five breaths. Repeat on the other side.

- **Twist** — Twists help rotate and lengthen your spine and can be performed sitting in a chair or while lying or sitting on the ground. Begin on your back and bring your knees up to your chest. Gently allow your legs to fall to one side and turn your torso in the opposite direction, extending your arm. Breathe in this position for 30 seconds and then repeat on the other side.

You can do this stretch sitting by raising your arms and twisting gently from your torso. If seated in a chair, you can grip the arm of the chair with one hand and put the other hand on the opposite leg. Extend your spine on the inhale and twist a little further on the exhale. Repeat on the other side.

Back Pain Is Common, yet Largely Avoidable

Once you understand that back pain is typically the result of poor posture, improper movement, pain hypersensitivity, emotional repression or a combination of these factors, it becomes clear why narcotics and surgery have such high failure rates. They simply don't address any of the underlying causes.

So, if you're among those seeking medical care for persistent back pain, I'd advise you to consider your options – several of which I've just reviewed – before filling that prescription or going under the knife.

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