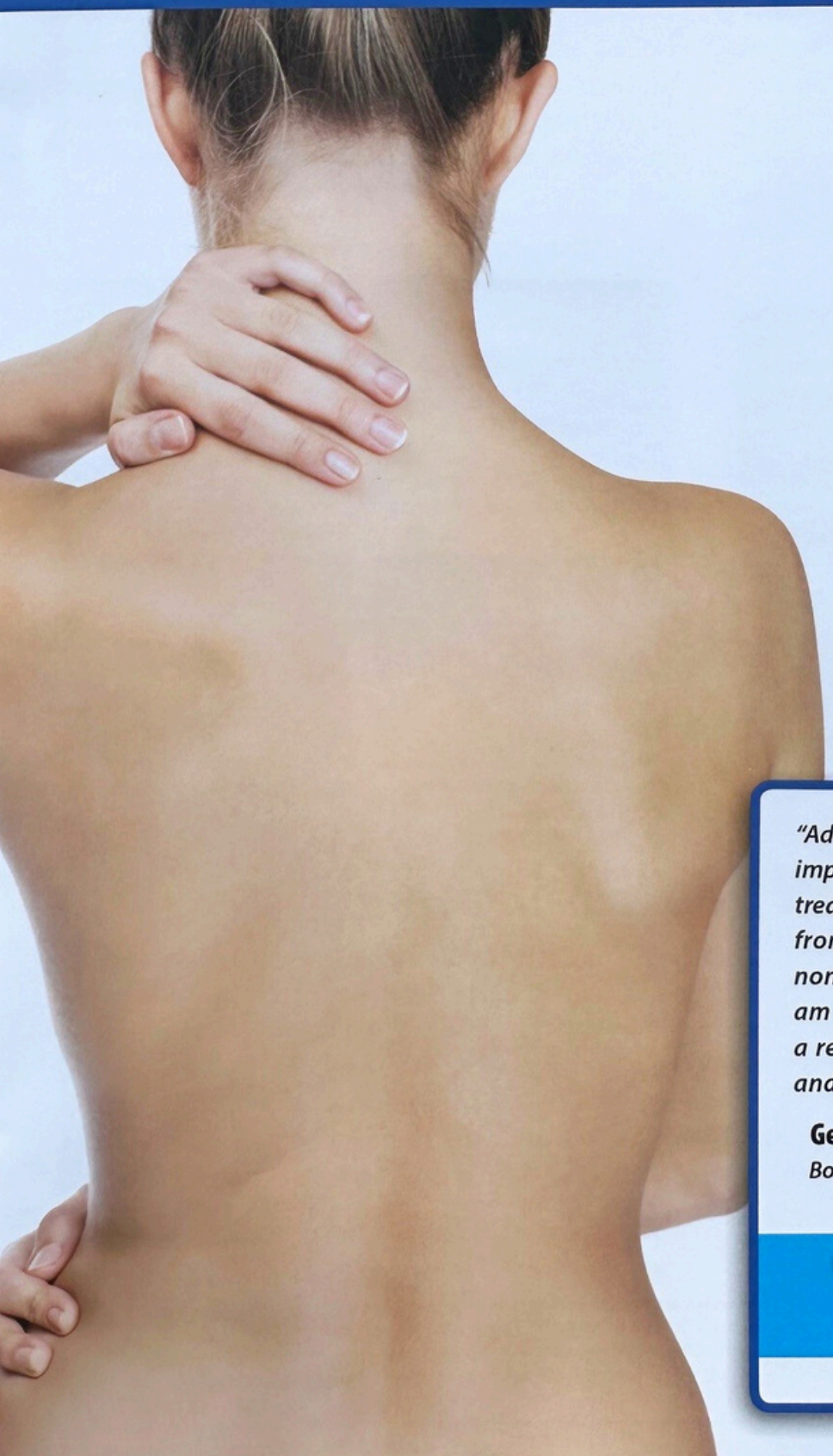
Are You Suffering From
Chronic Neck or Low Back Pain?

Now there's hope for lasting relief with Vertebral Axial Decompression Therapy



Treat Neck Pain, Back Pain, and Sciatica caused by:

- Bulging/Herniated Discs
- Degenerative Disc Disease
- Facet Syndrome
- Failed Back Surgery

Without the use of:

- ✗ Drugs
- ✗ Injections
- ✗ Surgery

"Adding VAX-D to my practice has been a most impressive and rewarding experience. I have treated hundreds of patients over the years, from ages 17 to 84, with this non-invasive, non-surgical, and non-drug treatment. I am thrilled to offer a treatment that has led to a reduction in the use of many medications and an increase in quality of life."

Gerald B. Weiss, MD, Back Pain Specialist
Board Certified in Neurology and Pain Medicine

VAX-D®

What Is VAX-D?

The Non-Surgical Solution for Low Back and Neck Pain

VAX-D®[1], short for Vertebral Axial Decompression, is a patented, non-surgical therapy for chronic neck pain, low back pain, and sciatica. It has been shown in clinical studies to be an effective, conservative treatment for bulging, herniated, or degenerative discs, and facet syndrome. Even post-surgical patients[2] and those suffering from certain types of stenosis (a narrowing of the spinal canal) have reported significant pain relief from VAX-D.

Over a series of relaxing treatment sessions, patients experience powerful pain reduction and healing. Some even notice an improvement in their symptoms after the first few treatments!

VAX-D—not to be confused with linear traction—lengthens and decompresses the spine. High intradiscal pressures are reversed, achieving negative pressures[3] via a patented slow ramp-up process. Negative pressure creates a vacuum inside the discs, which not only takes pressure off of pinched nerves, but helps to reposition bulging discs and pull extruded disc material back into place.

Spinal experts surmise that nutrients, oxygen, and fluids are drawn into the disc, stimulating the body's repair mechanism to provide the building blocks necessary to mend injured discs. VAX-D's process is the only patented treatment clinically proven to decrease disc pressures to the negative levels needed to facilitate healing!

Multiple Treatment Positions

Traditional Face Down Position

Face Down using the Passive Restraint Harness

Face Up using the Passive Restraint Harness[4]

Face Up using Axilla Posts[4]

Trust the Original, Patented VAX-D

Leading physicians in orthopedic medicine, pain medicine, neurology, and other specialties, in hundreds of clinics around the world currently utilize VAX-D's patented[5] technology. Many doctors choose the VAX-D over other devices because it employs the original, patented technology from which non-surgical spinal decompression therapy was born. VAX-D makes a commitment to back pain sufferers to offer an honest product backed by clinical research. VAX-D gives you real science with real results.

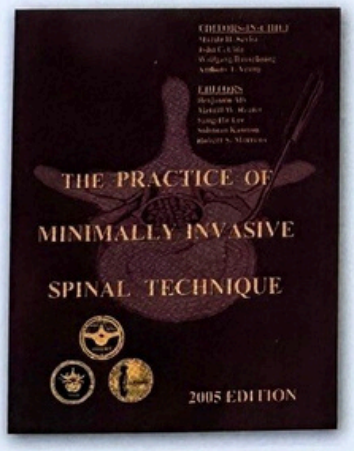
1. VAX-D is a registered trademark of VAX-D Medical Technologies.
2. Although surgical hardware is a contraindication for VAX-D Therapy, post-surgical patients with low back hardware may qualify for cervical treatment, and patients who have had surgery with hardware in the cervical area may qualify for lumbar treatment. This is to be determined on an individual basis.
3. Ramos, G., MD, Martin, W., MD, Effects of Vertebral Axial Decompression on Intradiscal Pressure, Journal of Neurosurgery, September 1994. Vol. 81, No. 3:350–353.
4. The clinical studies that demonstrate the effectiveness of Lumbar VAX-D therapy were performed while patients were lying face down.
5. VAX-D Patent #: 6,039,737

"I hurt my back when

I picked up a suitcase the wrong way. I was given traction exercises and experienced temporary relief but a few months later, I was experiencing continuous pain again, and sought out a different doctor.

An MRI showed that I'd herniated my L5–S1 disc, and I started VAX-D treatment the very next day. After only the first visit I felt the pain in my lower back decrease from a 9 to 2 on a scale of 1 to 10. A month after I began the treatment I left the country for a semester abroad and had no problem with the 10 hour flight or walking all over Europe. Thanks to my doctor and the VAX-D treatment, I was able to take full advantage of my stay, without back pain." — **Amanda I.**

VAX-D: Published Credibility



The definitive reference textbook on "The Practice of Minimally Invasive Techniques," published by The College of Physicians Publishing Division, has an editorial board comprised of several world-renowned orthopedic surgeons. Chapter 35 of the 2005 edition of this text focuses exclusively on VAX-D. The summary concludes that, "VAX-D should not be considered traction in the traditional sense but as decompression. VAX-D is the only non-invasive treatment that has been proven to decompress the disc; with other traction devices, there has been only indirect proof."

Invention Born of Necessity

How one physician's injury brought about the invention of VAX-D

Dr. Allan Dyer—Inventor

Meet Allan Dyer, MD, Ph.D., the inventor and founder of the revolutionary VAX-D technology. Dr. Dyer and his associates have consistently remained on the forefront of innovative medicine. As former Deputy Minister of Health in Ontario, Canada, Dr. Dyer's many contributions to health sciences include his pioneering research that contributed to the development of one of the most vital medical tools used in every hospital emergency room around the world: the heart defibrillator.

Dr. Dyer's own experience with back pain began when he himself was debilitated by a herniated disc. After conventional treatments failed, Dr. Dyer was driven to create a solution of his own and formulated the theories that led to the design and development of VAX-D. After spending more than six years in research and development with a team of physicians, engineers, and technicians at major teaching hospitals, Dr. Dyer introduced VAX-D in 1991.

Happily, Dr. Dyer used his invention on his own injured disc. Soon he was able to walk pain-free and has been doing so for more than 15 years. Today there are over 500 VAX-D units operating throughout the world. The number of patients currently treated by VAX-D exceeds 3,000 per day.

VAX-D®

What Is Causing My Back Pain?

While only a trained medical professional can accurately diagnose your back problems and recommend appropriate treatment, a basic understanding of common causes of back pain and how VAX-D works to alleviate them, can help you in making a more informed decision concerning your treatment options.

Understanding How the Spine Works

Your spine is composed of 24 bones called vertebrae. In between each vertebra is a fibrous disc (annulus fibrosus) filled with a jelly-like substance (nucleus pulposus), which provides flexibility and cushioning to the spine.

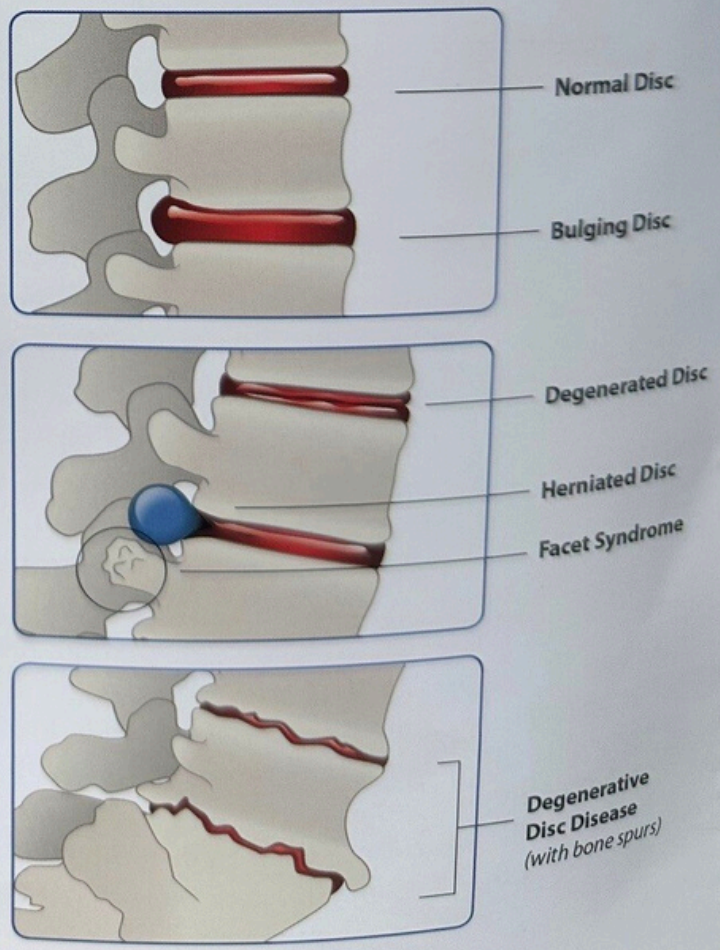
The vertebrae protect the spinal cord, which runs through a tube at the back of the spine called the spinal canal. In the lower portion of the back, spinal nerves exit the spinal canal between the vertebrae and unite as they move down through the pelvis. Some of these spinal nerves join to become the sciatic nerves, which travel down through the buttocks, along the backs and sides of the thighs and calves, and into the feet.

With such a dense network of nerves traveling throughout the back, it is easy to see how great discomfort may be caused by a slight upset in the delicate architecture of the spine. Accidents and injury may damage discs and vertebrae, putting pressure on nerves. This results in tingling, numbness, muscle weakness, or even sharp, shooting pain.

Shown in the illustration below are some of the more common diagnoses for back pain that will be covered at length in the coming pages.

Consider These Facts on Back Pain:

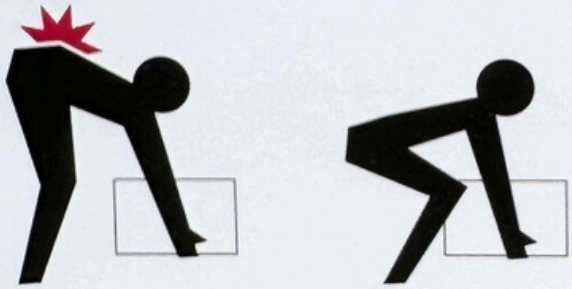
- *On any given day, 6.5 million people are in bed because of back pain.*
- *Approximately 5.4 million Americans are disabled annually due to back pain.*
- *Back pain is the #2 reason for hospitalization.*
- *Up to 85% of the U.S. population will have back pain at some time in their life.*
- *After cold and flu, back pain is the second-most common cause of work absence.*
- *Spine surgery is the second leading surgical procedure in America, with the total number in the U.S. approaching 500,000 per year.*
- *An estimated 93 million workdays are lost each year due to back pain.*



Lift with Your Legs, Not with Your Back!

Many bulging and herniated discs can be attributed to lifting objects incorrectly. When picking up an object from the floor, bend at the knees, keeping the spine as erect as possible. Rise using the strength of your legs, as their sturdy, more simplistic architecture is designed for such exertions. Putting great amounts of pull or pressure on the spine, when bent forward or backward, can compromise its delicate alignment.

Of course, there is no right way to lift an object that is simply too heavy. Listen to your body, and if you feel any discomfort while doing heavy lifting, back off and save your back!



Incorrect Lifting

Correct Lifting

"I suffered from recurring

low back pain for 14 years. Chiropractic adjustments had helped on occasion, but they were no longer working and I needed a new solution. An MRI showed that I had two herniated discs between L4–L5 and L5–S1. These hernations caused intense pain, which traveled from my lower back down my left leg, ending with numbness in my toes.

It was very frustrating that I could no longer participate in golf, tennis, and hiking. I work in sales and had to travel on airplanes weekly and my back made traveling miserable. I had to pay someone else to do tasks I previously did on my own. I tried to accept that this was just the way it was and I had to deal with it, until I tried VAX-D therapy.

After only one month of treatments I am back to playing tennis and golf. I have zero pain and can travel for my job without any discomfort. I have had no recurrences of pain whatsoever. VAX-D is the only way to go!" — **Thomas R.**

Other Common Causes of Back Pain:

Falls

Work Injury

Leaning forward at your desk

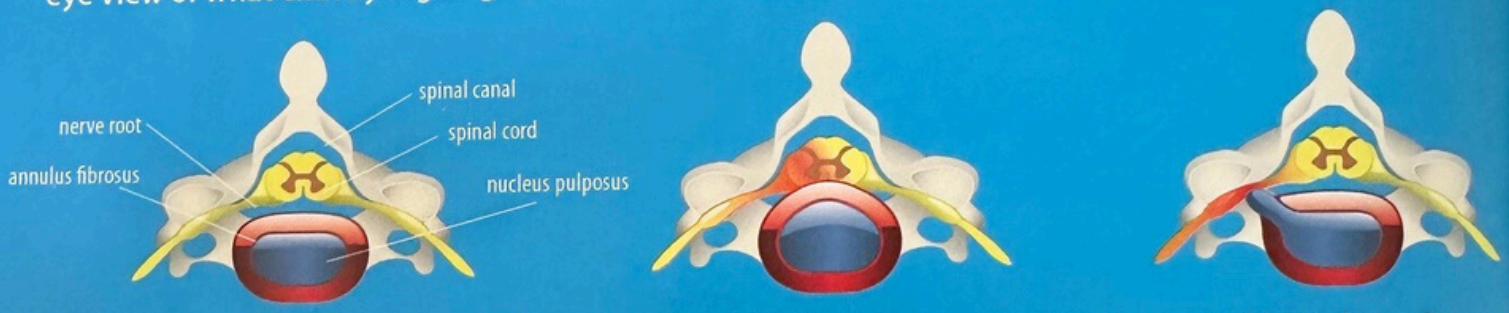
Obesity

Pregnancy

Bulging and Herniated Discs

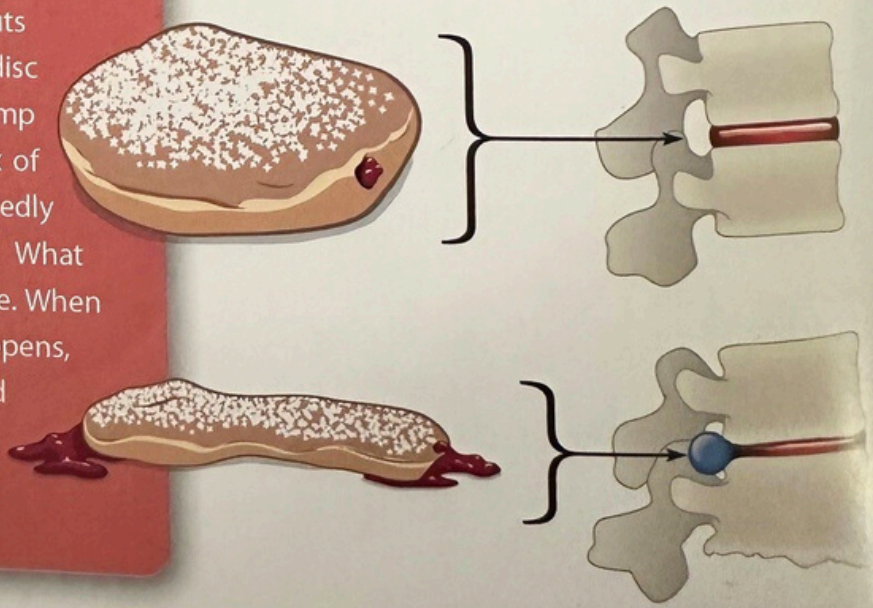
Bulging and Herniated Discs:

Discs are located between each vertebra and provide flexibility and shock absorption for the spine. The thick, fibrous outer disc wall, known as the annulus fibrosus, surrounds a jelly-like center, called the nucleus pulposus. Discs undergo tremendous amounts of stress, which can sometimes lead to a bulging disc, a weakening of the disc wall that causes the disc to bulge out and press painfully on surrounding nerves. A herniated disc occurs when the pressure within a disc becomes too great, tearing through the disc wall (annulus fibrosus), allowing a portion of the nucleus pulposus to protrude. The escaped nucleus pulposus may then impinge painfully on nerve roots, leading also to numbness, tingling, and/or muscle weakness associated with the condition of sciatic pain. The illustration below gives a bird's eye view of what exactly is going on when a disc bulges or herniates.



The Jelly Donut Analogy

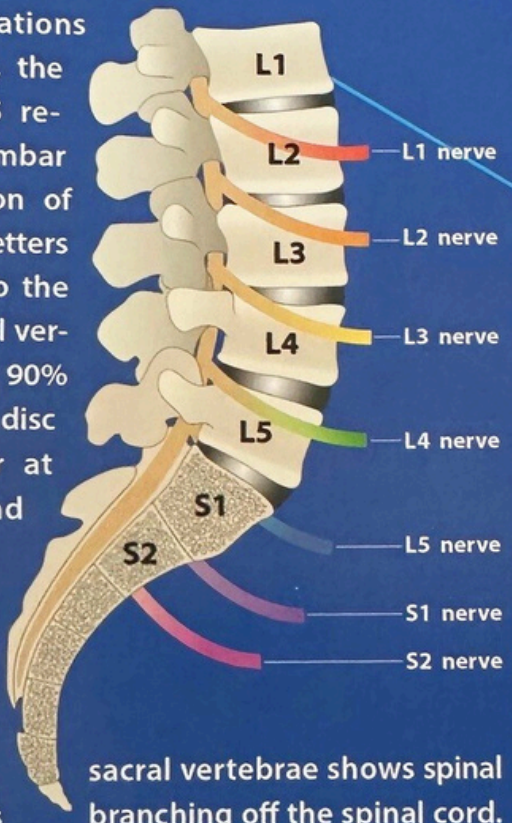
Comparing the discs in your back to jelly donuts gives you a good idea of what happens when a disc herniates. Picture in your mind a jelly donut, plump with strawberry filling. Have you ever set a box of donuts on your office chair, only to absentmindedly plop down on them a few moments later? What happens? The jelly oozes out under the pressure. When a disc ruptures or herniates, the same thing happens, except, unlike the jelly donut, a herniated disc can be repaired! That's where Spinal Decompression comes in.



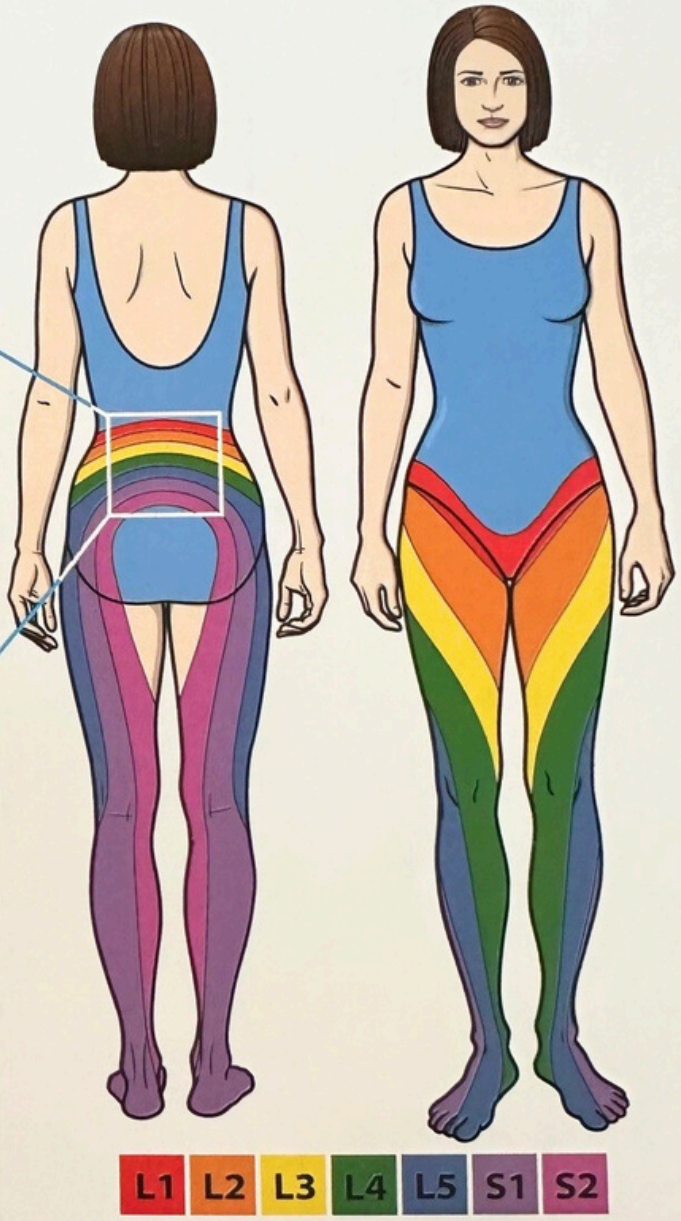
Sciatica: Mapping the Pain

Where Does It Hurt?

In the illustrations on this page, the letters L1–L5 refer to the lumbar (lower) portion of the spine. Letters S1–S2 refer to the first two sacral vertebrae. Over 90% of herniated disc injuries occur at the L4–L5 and L5–S1 discs.



In this box, a cross section of the lumbar and sacral vertebrae shows spinal nerve roots branching off the spinal cord. Each nerve root is depicted in a different color, corresponding to regions of the pelvis and legs (far right) that can be afflicted by pain, tingling, or numbness when the spinal nerve roots are compressed.*



What Is Sciatica?

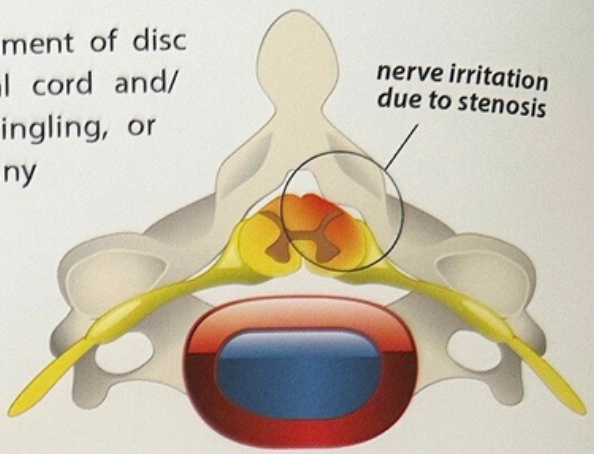
Sciatica is the sensation of pain, tingling, or numbness in the buttocks and/or legs produced by an irritation of the sciatic nerve. Multiple nerve roots extend from each side of the spinal cord in the sacral area (right above your tailbone), and join to form the sciatic nerve. The sciatic nerve actually only exists for a short length down the buttock, after which it branches into various nerves. These smaller nerve branches then travel down the leg, reaching the ankle and foot. The primary causes of sciatica are herniated, bulging, or degenerated discs, which put pressure on the spinal nerve roots. Other causes include bony growths on the spine (bone spurs) or compression of the nerves through injury. In rare cases, the sciatic nerve may be irritated by conditions such as tumors, pregnancy, or piriformis syndrome.

* Maps may vary by author.

Stenosis, Degenerative Disc Disease

What Is Spinal Stenosis?

Stenosis is a narrowing of the spinal canal due to the encroachment of disc material or bony growths that squeeze and irritate the spinal cord and/or extending nerve roots. This can lead to pain, numbness, tingling, or weakness in the legs, feet, or buttocks. The benefits that many stenosis patients derive from VAX-D may be due to its positive repositioning and rejuvenating effect on the herniated and degenerative discs that often accompany stenosis. Spinal stenosis, which may be found in conjunction with other spinal conditions, is commonly a contributing cause for sciatic symptoms.



What Is Degenerative Disc Disease?

Degenerative disc disease is not technically a disease, but rather a state of disc dehydration and deterioration due to a combination of cumulative trauma, poor dietary and exercise habits, and aging. As discs degenerate they become more prone to failure from physical stress, which may tear disc fibers and result in more complications, such as osteoarthritis, disc bulging, disc herniation, and stenosis.

Many spine experts conclude that the vacuum of negative pressure created within discs by VAX-D helps attract moisture from surrounding tissue, rehydrating and revitalizing thinning and torn degenerated discs.

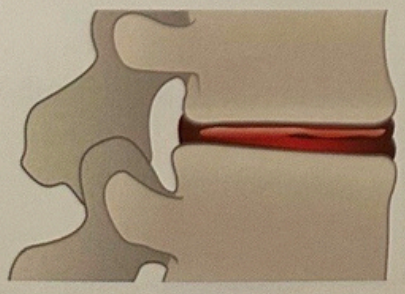
If You Don't Use It, You'll Lose It

Traumatic spinal injuries may cause patients to avoid their normal daily activities. Without proper treatment, pain will progressively worsen, resulting in decreased physical activity and gradual weakening of the supportive spinal muscles, leading to accelerated disc degeneration.

Going, Going… and Finally Gone.

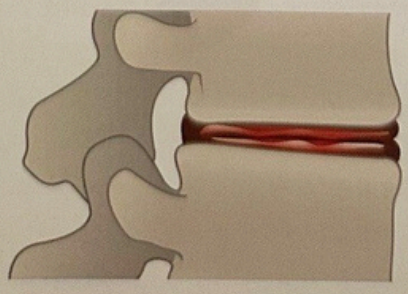
Phase I: Dysfunctional

Phase I of degenerative disc disease, is categorized by tears around the outer surface of the annulus. Further damage to the disc and surrounding tissue is exacerbated by the less effective disc.



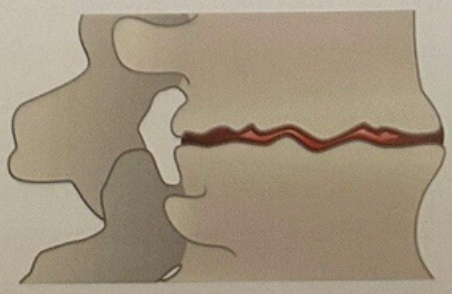
Phase II: Unstable

In Phase II, the joint progressively loses strength. Disc changes include further tearing along the horizontal axis of the disc, greater loss of disc height, and cartilage degeneration.



Phase III: Stabilization

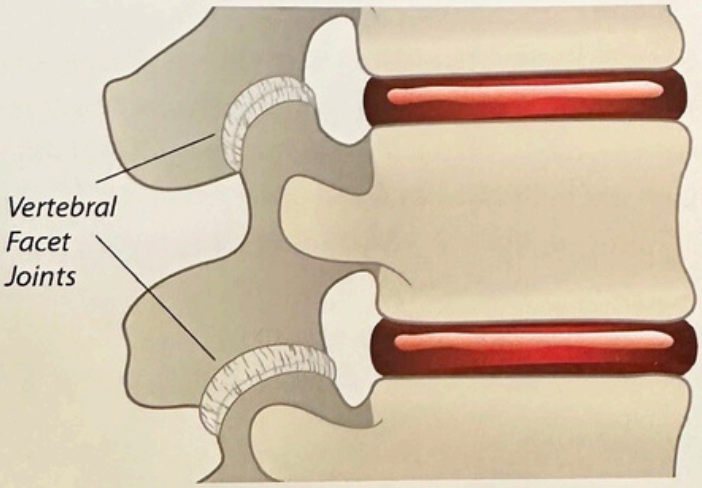
Further loss of disc height, disc space narrowing, moderate to severe endplate damage, disc fibrosis, and the formation of osteophytes can eventually cause surrounding vertebrae to fuse together.



Facet Syndrome

What Is Facet Syndrome?

Facets are the bony, wing-like protrusions extending from the back of the vertebrae that align with facets on the vertebrae above and below, and give the spine a more diverse range of motion. Facets function as guides for the spine and are not designed for bearing weight like vertebrae and discs. Joining adjacent facets are small ligaments called facet joints. Facet syndrome involves inflammation of the facet joints. It is one of the lesser-known but surprisingly common causes of back pain.



Bearing the Brunt of Unhealthy Discs

When a person is standing upright, the facet joints bear about 16% of the normal compressive forces of the spine.[1] With disc height loss of 1–3 mm, the compressive load can be five times the normal amount on the facet joints.[2] Bearing the brunt of all that weight can lead to tearing or degeneration of the ligaments, as well as inflammation of surrounding tissues. Adhesions over the joint surface can form over time, leading to loss of mobility and breakdown of facet cartilage. An indicative symptom is a deep ache in the lower back that may extend to the buttocks, hip, and even below the knee. Facet syndrome is often associated with degenerative disc disease and soft tissue damage in the lumbar spine.

Contributing Factors to Spinal Injury and Disease

Age:

As we grow older, discs may dry and crack, losing flexibility and the ability to cushion the vertebrae. Good diet, plenty of exercise, and water intake can help slow the process.

Exercise:

Exercise keeps the muscles surrounding the spine strong, decreasing injury susceptibility. Exercise also helps to maintain healthy blood flow to discs and surrounding tissues.

Diet:

A healthy diet with appropriate supplementation will help ensure that your bones and tissues are receiving proper nutrients.

Activities:

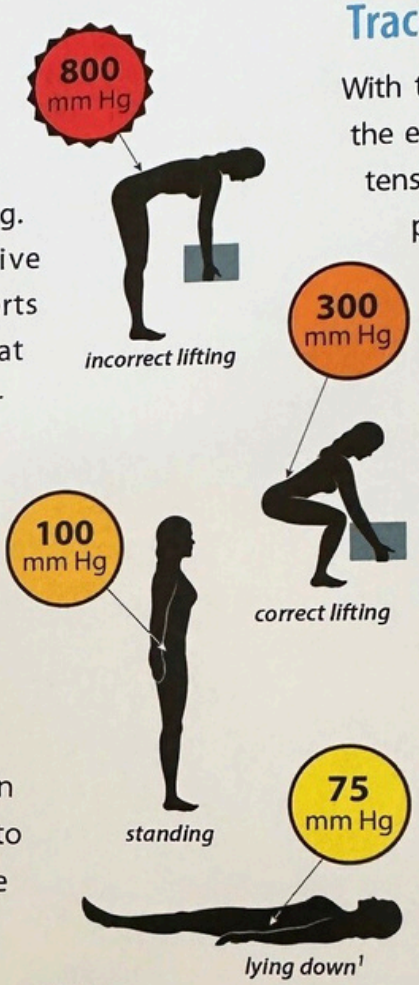
Maintain an awareness of what your body can handle. Falls or reckless exertions on the body, such as lifting heavy objects, can lead to severe spinal injuries. Be smart!

1. M.A. Adams, W.C. Hutton The effect of posture on the role of the apophysial joints in resisting intervertebral forces. *Journal Bone Joint Surgery Br.* 1980; 62:3858–62.

2. Dunlop RB, Adams MA, Hutton WC. Disc space narrowing and the lumbar facet joints. J Bone Joint Surg Br. 1984; 66:706-10.

How Does VAX-D Work?

High intradiscal pressures cause discs to bulge out and press painfully on nerve roots. They also make for a compressed, anaerobic environment unsuitable for healing. Decompression produces negative pressures within the disc which experts believe creates a vacuum effect that draws in nutrients and fluids to promote the repair of injured discs and surrounding tissues. This vacuum has also been shown to aid in the retraction of escaped cushioning gel from herniated discs.



When Negative Is a Positive

Much like gauging the air pressure in a car tire, scientists have been able to use pressure sensors to measure the various pressures put on spinal discs while lifting, standing, sitting, lying down,[1] undergoing traction, and during VAX-D therapy. Like other pressures found in the body such as blood pressure, intradiscal pressure is measured in millimeters of mercury (mm Hg).

While traction, physical therapy, and manipulation may reduce disc pressures to as low as 40 mm Hg[2], only VAX-D has been shown to achieve negative disc pressure. Clinical studies have shown that negative pressures as low as -160 mm Hg[3] are created within the injured disc during VAX-D therapy!

Traction Is Not Decompression

With traction, weights are added one by one to the end of the traction bed which, in turn, adds tension to a harness secured around the patient's pelvis, lengthening the spine. The intention is to relieve pressure, but the linear force of traction can produce spasming which may lead to greater injury. Studies confirm that the benefits of traction come from simply immobilizing the spine. In fact, the Quebec Task Force ruled in 1996 that traction was not an effective treatment for chronic herniated discs.[4] The results are not long-lasting and cannot produce negative disc pressure. Like traction, VAX-D also lengthens and adds tension to the spine, but it is VAX-D's patented method that produces vastly superior results.

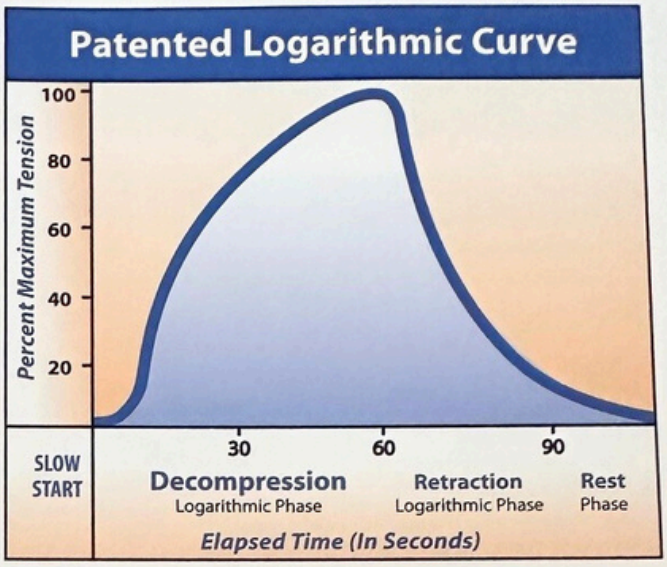
The Logarithmic Difference

Normally, pulls exerted on the spine trigger sensory receptors in the back to tighten the muscles surrounding the vertebrae and discs in an effort to protect them from injury—a mechanism in the body known as the proprioceptor response. VAX-D therapy is able to detect, then bypass this response through a motion-controlled biofeedback system. Now that the body is "tricked" into thinking the spine is not under tension, the stabilizing muscles of the back can relax completely. With the body's natural protective mechanism at bay, VAX-D can administer tension without causing injury.

1. Nachemson, A., The load on lumbar discs in different positions of the body. Clin. Orthop. Vol. 45, 107–122 (1966).
2. Andersson, G.B.J., Schultz, A.B. and Nachemson, A.L., Intervertebral disc pressures during traction, Scandinavian Journal of Rehabilitation Medicine, Supplement 9: 88-91, (1983).
3. Gustavo Ramos, MD, William Martin, MD, Effects of Vertebral Axial Decompression on Intradiscal Pressure, Journal of Neurosurgery, Vol. 81, No. 3. September 1994.
4. Teasell, Robert W., Limitations of the Quebec Task Force on Whiplash Associated Disorders, University of Western Ontario, 1996.

The Key to Decompression

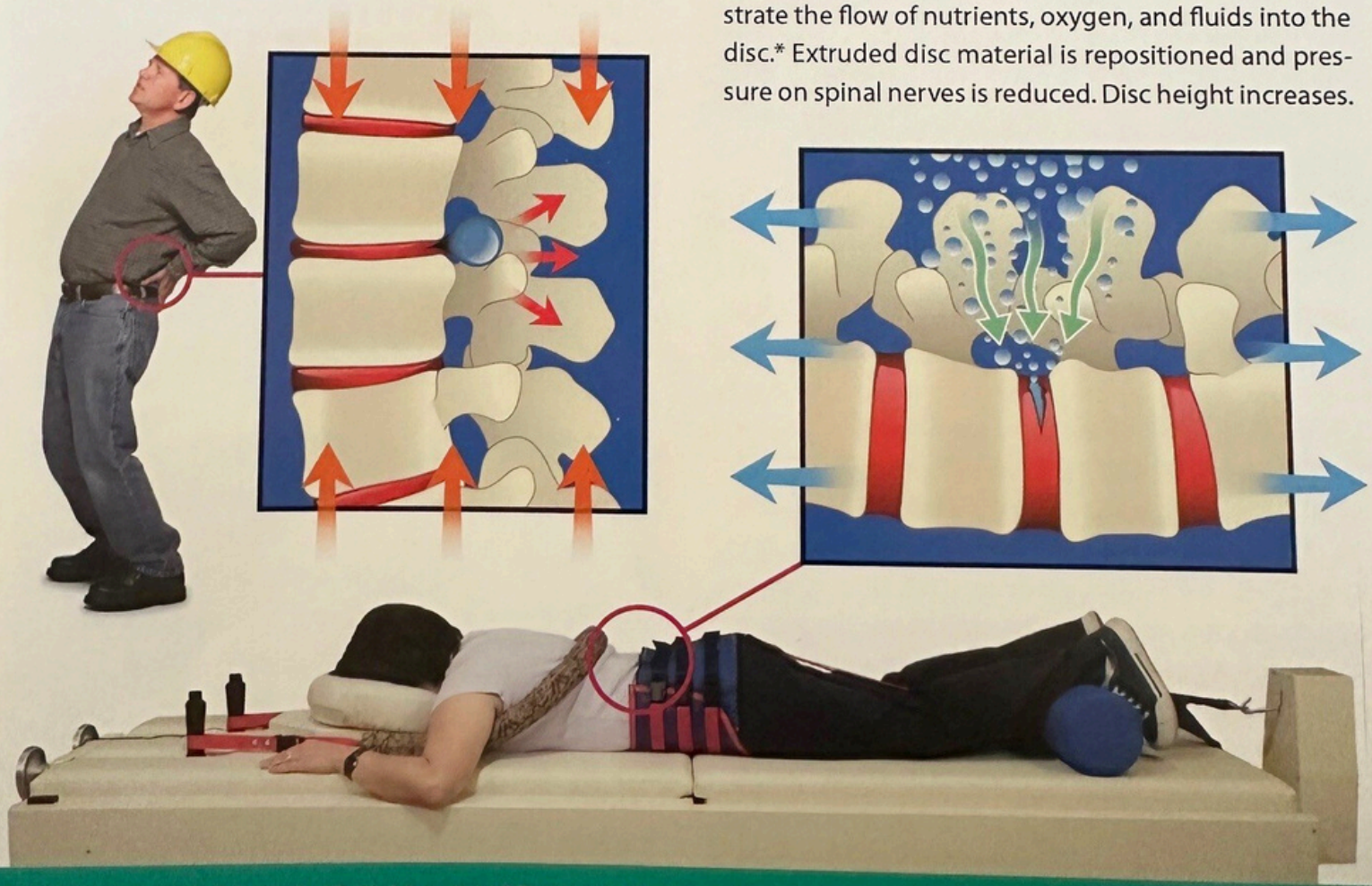
VAX-D achieves decompression through an intricately timed series of pulls, holds, and releases. During a single treatment—which may last up to 45 minutes—tension moves along the logarithmic curve (shown right), slowly ramping up, holding, then decreasing. VAX-D's biofeedback system adjusts this curve of tension specifically to each patient's needs, making every session truly individualized.



VAX-D involves three phases that repeat up to 15 times throughout a session—the Decompression Phase, the Retraction Phase, and the Rest Phase. During the Decompression Phase, tension slowly mounts, lengthening the spine. Up to 99 pounds of tension may be exerted upon discs, dropping spinal pressures and allowing decompression to occur. During the Retraction Phase, tension decreases and the spine is retracted. This is followed by a short Rest Phase.

Before VAX-D: In the illustrated lumbar spine below, vertical orange arrows show how compressive forces during injury can cause a disc (red) to herniate, allowing the inner disc material (blue) to bulge outward (small red arrows). Disc height decreases.

During VAX-D: The illustration below depicts the lumbar spine as it would be situated in an individual lying face down, undergoing VAX-D therapy. Horizontal blue arrows represent spinal lengthening and reduction of external pressures. Green arrows demonstrate the flow of nutrients, oxygen, and fluids into the disc.* Extruded disc material is repositioned and pressure on spinal nerves is reduced. Disc height increases.



* Michael Schuenke MD, Ph.D.; Erik Shulte, MD; Udo Schumacher, MD Thieme Atlas of Anatomy pg. 93. Germany: Georg Thieme Verlag, 2006.

Cervical Decompression for Neck Pain

VAX-D for Neck Pain

The VAX-D cervical (neck) harness is designed specifically for neck pain and works on the same principles as VAX-D therapy for low back pain. Pressure within a damaged disc can be reversed, drawing in fluid and the herniated disc material. This removes pressure from nerve roots and relieves pain.

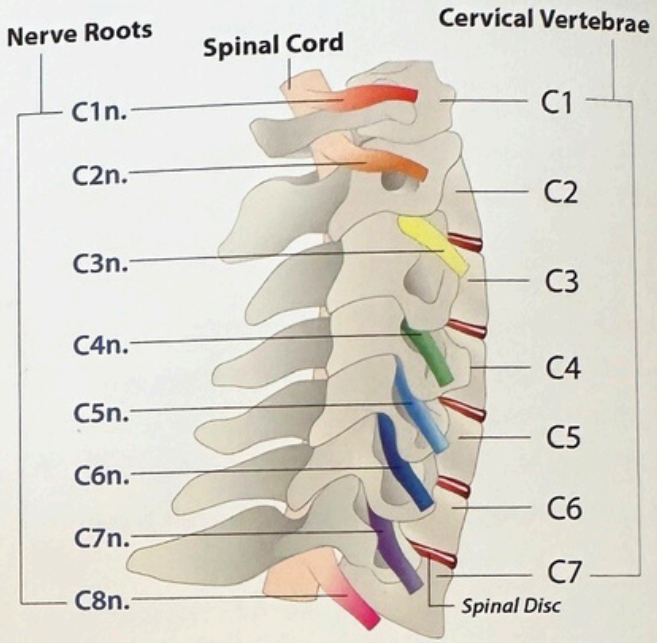
The Architecture of Your Neck

The cervical spine contains and protects the spinal cord in the neck while providing support and mobility for the head. The illustration (at right) shows the seven cervical vertebrae, labeled C1–C7. The skull is supported by C1. Cervical vertebrae are smaller in size compared to other vertebrae, giving the neck a more diverse range of motion and flexibility.

The cervical nerve roots, labeled C1n.–C8n., join together and extend from the spinal cord into the supporting muscles, tendons, and ligaments of the neck. The nerves originating in the neck extend down into the shoulders, arms, hands, and fingers, providing muscular control and sensations to the upper extremities.

Cervical Radiculopathy

Nerve damage caused by severe pressure to the cervical nerve roots is known as Cervical Radiculopathy (ra-dik-u-lop'-a-thee). Common causes include disc bulging or herniation, degenerative disc disease, spinal stenosis, osteoarthritis, and facet syndrome. Symptoms are pain, numbness, tingling, and/or muscle weakness in the regions of the shoulders, arms, hands, or fingers. While an X-ray or MRI can help to rule out a serious injury, a detailed medical history and physical exam can help your doctor correctly determine the precise cause of the symptoms.



Cervical Dermatome Map: A dermatome is a region of skin supplied by nerve fibers originating from a single spinal nerve root. Compression of the nerve root affects sensation in the corresponding dermatome. The most common nerve root injuries caused by herniated discs are at the levels of C5n.–C7n. *(Maps vary).*

C1n: No sensory dermatome. Upper neck muscle movement.

C2n: Back of head, upper to mid neck.

C3n: Upper back of neck, mid to lower front of neck. C3n.–C5n. supply diaphragm for breathing.

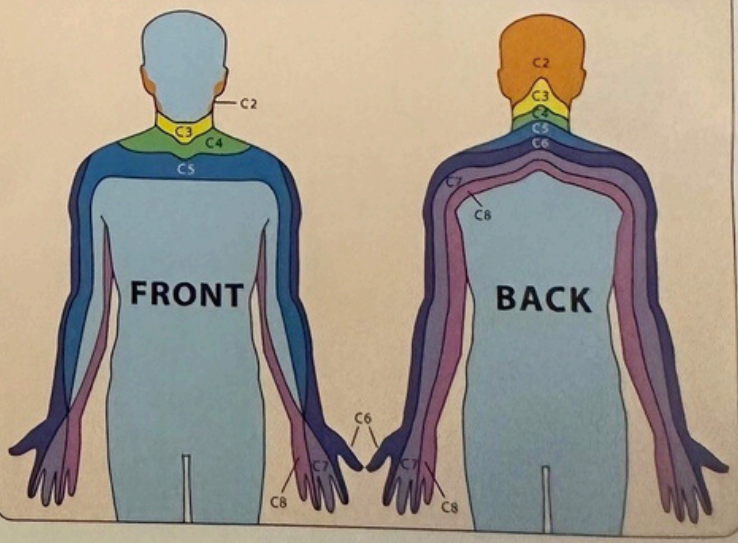
C4n: Lower neck to collar bone.

C5n: Shoulders, biceps, and forearms.

C6n: Biceps, lateral forearms, index fingers, and thumbs. Wrist extension.

C7n: Middle, index fingers, center of palm. Wrist and flexion.

C8n: Ring and little fingers. Sensation and flexing.



Whiplash Injuries and Neck Pain

Whiplash in the United States and Canada

Annually, over three million whiplash injuries occur in the U.S. and 300,000 in Canada from motor vehicle collisions,[1] with the most damaging being a rear end collision. Sports injuries, falls, and sudden stops on theme park rides can also cause whiplash injuries. The extreme motions occurring during whiplash can injure practically every tissue and structure in the neck.[2]

Even low velocity auto accidents can cause extensive damage to the spine. Most whiplash injuries occur at speeds under 15 mph.[3]

In a rear end collision, a large truck or SUV going 5 mph can do more damage to the front car occupant than a small car going 20 mph.[3] Even in very low speed collisions (5 mph), G forces generated by the impact can turn the weight of a 10-pound head into the equivalent of a 150-pound load on the cervical spine. As the head and body are thrown in various directions, tremendous compressive and shear forces are exerted on the spine.[3]

Increased Risks for Chronic Neck Pain

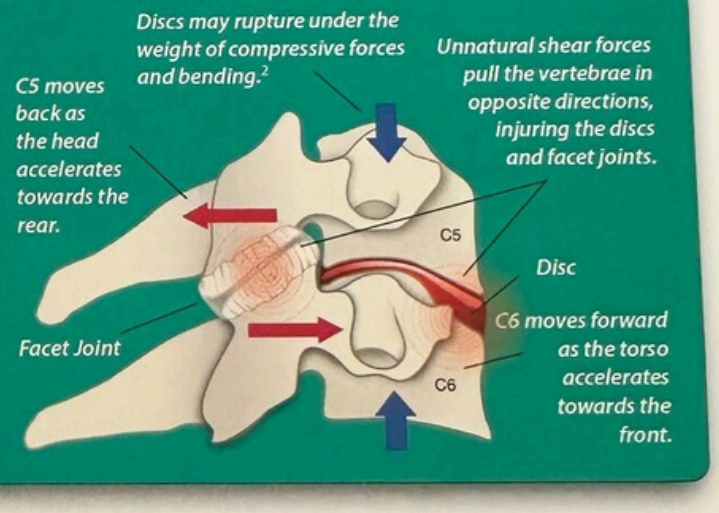
- Previous neck injury
- Older age
- Head turned at time of impact
- Being unprepared for impact, so neck muscles cannot tense to immobilize the spine
- Females: double the risk due to smaller musculature[4]
- Immediate pain and/or intense pain or numbness

Recovery Prognosis: *Roughly ⅓ of whiplash patients recover within three months, another ⅓ will have persisting lower levels of pain and disability, and ⅓ will have high levels of persisting pain and disability.*[5]

Although symptoms usually appear within 24 to 72 hours after injury, they may not manifest for three months or longer. Intervention within two weeks of the accident helps prevent chronic neck pain and disability.[5]

Dangerous Curves: One-tenth of a second into the crash, the lower cervical vertebrae go into hyperextension (extreme bending backward) and the upper vertebrae go into flexion (forward), creating an "S-shaped" curve.

Shear Force acts in opposite directions upon cervical structures, especially affecting vertebrae C5–C7, with damage and compression to the C6 and C7 nerve roots. Shear can tear ligaments, compress and tear facet joint capsules, and cause high stretching of the disc wall. The facet joints and discs contain many nerves, making them particularly sensitive to pain. In more than 50% of whiplash cases, facets and/or the discs are the injured structures.[6]



Nearly 40% of whiplash injuries develop into degenerative disc disease within 5 to 10 years.[3] Chronic pain from whiplash is commonly due to facet and/or disc damage.[6] Many spinal care experts are finding VAX-D cervical therapy to be a safe and effective treatment for whiplash symptoms that may include:

- Neck pain and stiffness
- Headache
- Low back pain
- Upper extremity pain, weakness, and numbness
- Thoracic outlet syndrome
- Carpal tunnel syndrome

1. http://www.srisd.com. The Spine Research Institute of San Diego is an organization that disseminates information relating to injuries from motor vehicle trauma.
2. M. Adams, N. Bogduk, et al. The Biomechanics of Back Pain. Churchill. New York. 2006.
3. M. Melton. Medical Evidence of Whiplash. James Publishing, Costa Mesa, CA. 2008.
4. The Insurance Institute for Highway Safety (www.iihs.org).
5. G. Jull, et al. Whiplash, Headache, and Neck Pain. Churchill, Livingstone, Elsevier. New York. 2008.
6. J. Schofferman, N. Bogduk, P. Slosar. Chronic Whiplash and Whiplash-Assoc Disorders: An Evidence-Based Approach, Journal of the Amer Acad of Orthopaedic Surgeons, 15(10): 596–606. 2007.

Is VAX-D Right for Me?

You Are a Candidate for VAX-D If:

- You have chronic or severe back pain caused by bulging or herniated discs, degenerative disc disease, sciatica, and/or facet syndrome.
- You have failed back surgery syndrome.
- You have been told to consider surgery.

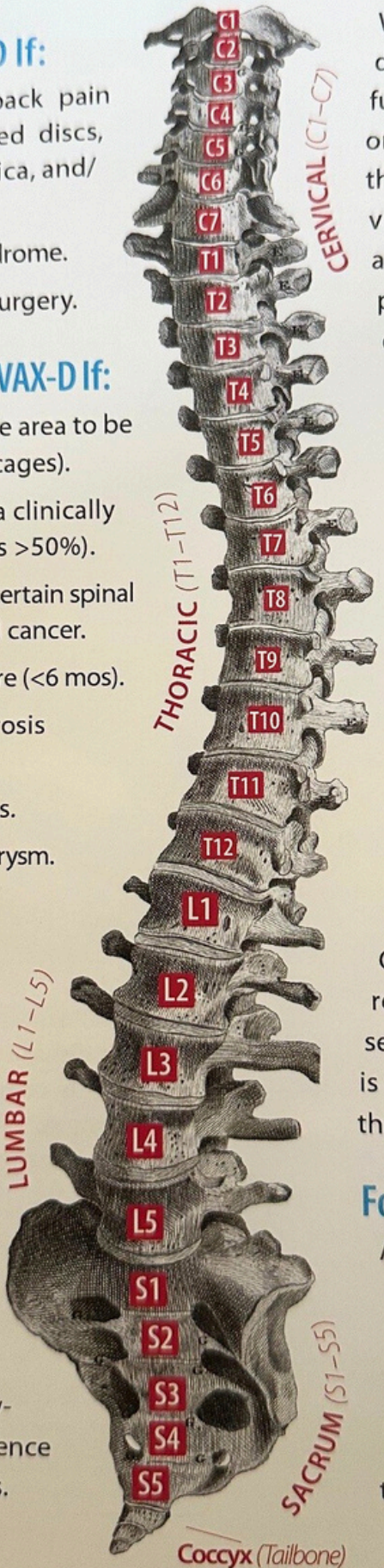
You May *Not* Be a Candidate for VAX-D If:

- You have surgical hardware in the area to be treated (titanium rods or fusion cages).
- You have been diagnosed with a clinically unstable back (spondylolisthesis >50%).
- You have rare conditions such as certain spinal infections, or pelvic or abdominal cancer.
- You have a recent vertebral fracture (<6 mos).
- You suffer from severe osteoporosis (DEXA T-Score of -2.5 or lower).
- You have ankylosing spondylitis.
- You have an abdominal aortic aneurysm.
- You are pregnant.

When Can I Expect Results?

Many patients report a reduction in pain after their first few VAX-D treatments. Although this is a wonderful sign that VAX-D is working, the healing process is not finished! Quitting treatment early can result in a relapse of symptoms, as well as wasted time and money.

On the other hand, it may take several sessions before patients experience a noticeable remission of symptoms.



Why is this? Bulging and herniated discs may need several sessions to fully reposition themselves depending on your physiology. You can be sure that your spine is responding to VAX-D's vacuum effect, but results are not always immediate. Using time-tested protocols, VAX-D can be tremendously effective at eliminating back pain!

VAX-D Works, Given the Chance

With herniated and degenerated discs, the escaped nucleus pulposus may be partially or completely retracted back into the disc after just the first session (though it normally takes longer), relieving a great deal of pain.

However, pain reduction does not indicate full recovery, and a full recovery is essential to preventing reinjury. This may mean completing as many as 20 to 25 treatment sessions. Older or more severe injuries may require even more sessions. This may seem like a lot of treatments, but VAX-D is working with your back as it heals, and that is a process that cannot be rushed.

Follow Through for Best Results

As with all wounds, tears in the disc wall need time to heal. The absence of pain does not mean the tears have had time to seal up, which is crucial to preventing the newly retracted nucleus pulposus from escaping and putting pressure back on the nerves.

* Individual patient results may vary.

Completing Your Course of Therapy

Staying the Course for a Full Recovery

Completing your course of therapy as determined by your doctor, according to the severity of your condition, takes time. Each session prescribed is needed to maintain a fully hydrated and oxygen-rich environment for the damaged disc. The same principles apply for those with degenerative discs. Adhering to the VAX-D protocol will allow for an enriched disc environment to speed the body's natural healing mechanism. These last remaining VAX-D sessions are crucial and will enable the disc to heal completely.

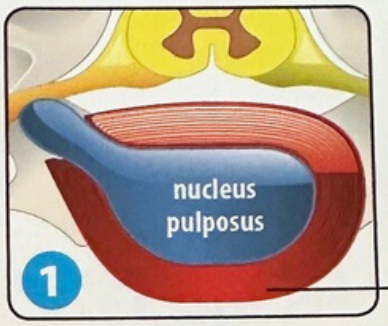
Clinical Evidence for Following Through with VAX-D Treatment:

The Journal of Neurological Research published a study comparing two groups of patients who underwent VAX-D® therapy. One group received an average course of treatment consisting of 18 daily sessions and the other group received half that number of daily treatment sessions.

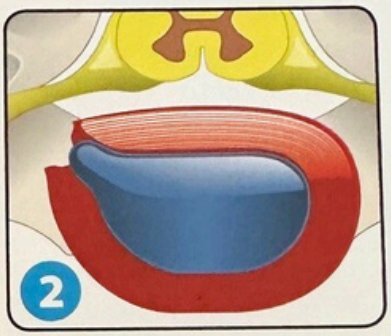
The treatment parameters for all patients differed only in the number of sessions. Seventy-six percent of the higher dosage group achieved remission of low back pain compared to forty-three percent of the lower dosage group.[1]

1. Ramos, Gustavo, Efficacy of Vertebral Axial Decompression on Chronic Low Back Pain: Study of Dosage Regimen, Vol. 26, April 2004.
2. The illustrations above show artistic renderings which offer simplistic explanations of complex physiological processes.

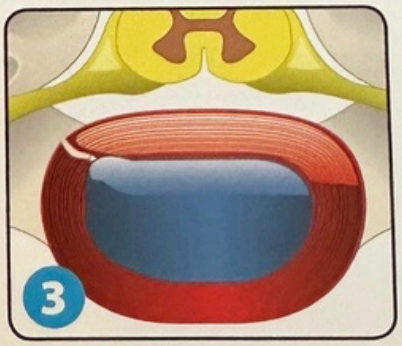
An Illustrated Model of VAX-D In Action[2]



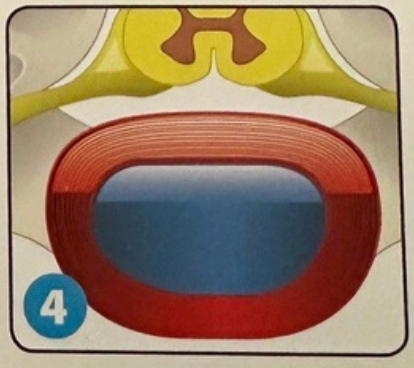
Before VAX-D:
The annulus has torn under pressure, and the escaped nucleus pulposus presses painfully on the sciatic nerve. Symptoms include numbness, tingling, and pain.



First Signs of Relief:
In as little as one or two treatment sessions, the nucleus pulposus may be partially retracted into the disc, taking pressure off nerves, thus dramatically reducing pain.



It's Working! *The nucleus pulposus may be completely repositioned by the tenth treatment. VAX-D aids in the flow of blood, oxygen, and nutrients to the disc, which helps the torn annulus continue to heal. Although the disc wall is almost completely healed, a small fissure remains. Fissures like this require continued sessions of VAX-D in order to be properly mended.*



Finished!
With a fully healed disc wall, and a repositioned nucleus pulposus, patients can return to a normal, healthy, and active lifestyle free of pain!

What Can I Expect?

Getting Started

Your doctor will recommend an X-ray or MRI to pinpoint the specific areas of damage and discomfort. Using this information, your doctor will determine your course of therapy and whether you are a candidate for VAX-D.

At the beginning of each session, you will be comfortably fitted with VAX-D's patented pelvic harness shown in clinical studies to achieve optimal decompression of the lumbar spine. Patients may choose to receive their treatment lying face-down or on their back. Face-down is generally the ideal position, as it allows gravity to assist in the repositioning of herniated disc material.

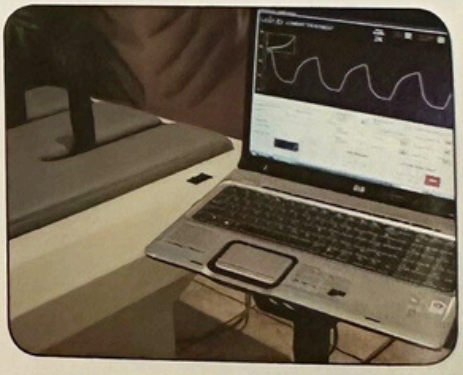
Keeping Comfort a High Priority

For face-down treatments, a quiet fan in the base of a memory foam pillow supplies a gentle breeze, keeping your face cool with plenty of fresh air to breathe. Some patients prefer to be treated while lying on their back. This treatment position is usually a choice for individuals with respiratory problems and other health issues that make it uncomfortable to lie face-down for long periods.

The Pressure Is Off!

During VAX-D treatments, you will probably notice a slow lengthening of your spine as your discs are gradually decompressed and relieved of pressure. This process of decompression is safe and painless. While some patients with extensive injuries may report mild discomfort during the first few treatment sessions, their discomfort should subside upon subsequent visits. Should you feel the need, quick-release clasps on the upper-body harness, optional hand grips, or a hand-held emergency stop button allow you to stop at any point Each treatment session lasts up to 45 minutes.

Biofeedback for Better Results



VAX-D's computerized biofeedback mechanism takes multiple samples of the tensions being applied to the spine many times per second. The tension is then automatically adjusted according to the spec-ific responses of each patient, resulting in a highly personalized treatment. The process is fully automated and all treatment information is displayed before the technician.

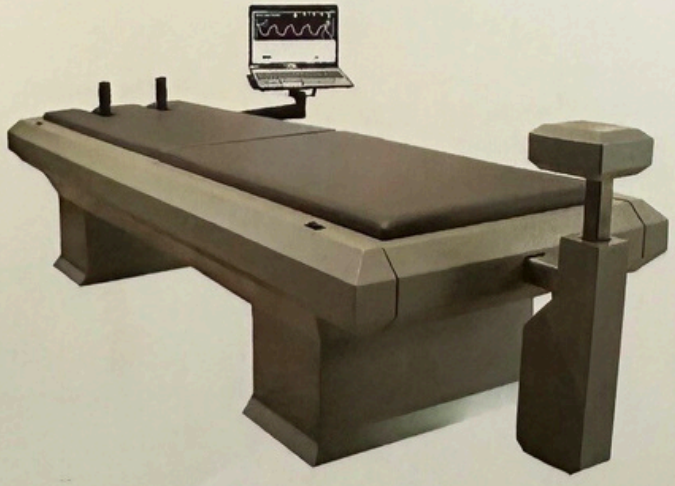
"I was brought into my

VAX-D treatment in a wheelchair. For three years, I had suffered from low back pain and sciatica in both legs and numbness in one leg. In the first week of VAX-D treatment, I felt almost instant relief, and it's just been getting better each day.

At first, they sometimes had to help me up off the table after treatment, but now I just get up and move around like nothing was ever wrong. I've returned to normal activities, including yard work, and am eager to return to my golf game. From being in a wheelchair, to being able to walk freely again without any pain, well, that's huge." — **Jeff C.**

What's In A Typical Treatment Regimen?

A typical VAX-D treatment regimen consists of 20–25 total sessions, each lasting up to 45 minutes. Some conditions may require fewer visits while some occasionally may require more, depending on your doctor's recommendation.

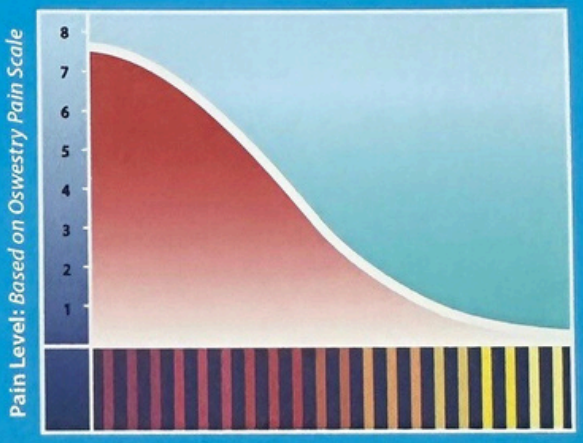


Many patients report relief from their pain and other symptoms during the first few treatment sessions, and most experience dramatic pain relief after completion of their prescribed VAX-D therapy program.

Four Years After VAX-D Therapy

Long Term Results from VAX-D

A four-year, multi-center followup study* on the lasting effects of Vertebral Axial Decompression (VAX-D) showed remarkable levels of sustained relief in 23 back pain patients. All had undergone several types of treatment before receiving VAX-D therapy. Before treatment, patients reported an average pain level of 7.41 out of a possible 8.



Elapsed Time: *20 Treatment Sessions*

Immediately following treatment protocol:

- Average pain levels were reduced from 7.41 to 3.41 immediately after treatment.
- 71% showed more than a 50% reduction in pain.

Four years following treatment protocol:

- 91% were able to resume their normal daily activities.
- 86% showed a 50% or better pain reduction.
- Employment status increased by 40% among those previously out of work due to back pain.
- 87% were either working or were retired without having back pain as the cause for retirement.
- 52% of respondents reported a pain level of zero.
- Average pain levels were further reduced to 1.57.

Pain relief not only lasted but improved!

** R. H. Odell, MD, PhD and D. A. Boudreau, DO, in the March 2003 edition of Anesthesiology News (Vol. 29).*

VAX-D Before and After Surgery

Surgery—Know the Risks

In some cases, surgery may be the only option, but most medical professionals and even surgeons would agree that non-invasive options should be explored before turning to surgery. Although advances in surgery have made many procedures less invasive and more effective, surgery comes with inherent associated risks such as infection, clotting, and scarring. Combined with high costs and lengthy recovery time, and it only makes sense to consider all of your options before deciding to have surgery.

Failed Back Surgery Syndrome

Failed Back Surgery Syndrome is real a term used when pain and loss of mobility persist long after surgery. According to the American Academy of Orthopedic Surgeons, there are approximately 200,000 laminectomies performed every year with an estimated 20–30% of these operations reported to be unsuccessful. A laminectomy removes bone and thickened tissue that is narrowing the spinal canal and squeezing the spinal cord and nerve roots.

"After having two failed

spine surgeries, I was left with numbness in my toes, foot, and leg. It hurt to walk, sit, and even lie down. After six years of pain, I just wanted relief. After undergoing a complete course of VAX-D therapy, it felt like a miracle to be able to get back to doing things. Even my family doctor was amazed at my progress. I feel blessed to have found this treatment." — **Amanda I.**

"I first learned of VAX-D

while visiting my father who was having neurosurgery at University Hospital in London, Ontario, Canada. My father was three weeks into an induced coma, and so how am I to spend my days? The surgeon set up a visiting physician spot for me in the neurosurgery research department. That is where I first met Allen Dyer, MD, Ph.D., and VAX-D inventor. At the time, VAX-D was undergoing clinical trials. I was fascinated, as I had undergone surgery myself on my L4–L5 disc. Unfortunately, VAX-D was not yet available in the US.

Soon after returning home I ruptured my L5-S1 disc, which is a common occurrence after surgery at an adjacent level due to increased motion and stress. Eventually I was able to acquire a VAX-D table and I was the first patient. I have done fine since that time. No more surgery."

— David C. Duncan, MD —

Physician and VAX-D Patient

Great News for Post-Surgical Patients!

Post-surgical patients who still suffer from pain have experienced fantastic therapeutic results from non-surgical decompression therapy on the VAX-D[1]. While those with surgical hardware*, such as brackets, plates and screws, are not candidates for VAX-D, many post-operative patients are. If you have had surgery with unsatisfactory results or have suffered a relapse, consult your doctor about the possible benefits of VAX-D.

* Although surgical hardware is a contraindication for Non-Surgical Spinal Decompression, post-surgical patients with low back hardware may qualify for cervical treatment, and patients that have had surgery with hardware in the cervical area may qualify for lumbar treatment. This is to be determined on an individual basis.

VAX-D vs Surgery: A Case Study

VAX-D Over Surgery: Corporations and Employees Both Benefit

Dr. David C. Duncan, MD, of Tulsa, Oklahoma, collaborated with a local refinery in an effort to compare the costs and benefits of VAX-D versus surgery for refinery employees suffering from low back injuries. The 10-person case study revealed that, for the individuals studied, ***the cost of surgery was almost nine times more than the cost of VAX-D, and had less desirable recovery outcomes as well.***

Dr. Duncan, who has been using VAX-D in his practice for over 20 years, recalls how other patients have benefited from using VAX-D:

"I treated a patient who was on disability and in a wheelchair with a cervical support. She is now employed, and has no more need for a wheelchair, crutches, or a cane. Over the last two decades, I have successfully treated multiple patients with lumbar disc disease. Very few have gone on to surgery. All things being equal, VAX-D is my first choice for chronic and semi-acute back injuries."

	VAX-D	Surgery
Number of Patients	5	5
Total Procedures	6	11
Initial Outcome	All report absence of pain	All report some daily back pain
Current Outcome	One was re-treated a second time. All are now working.	Three operated on a second time. One operated on a total of 5 times. One on long term permanent disability. One is candidate for perm. partial disability.
Time Spent Off Work	36.75 hours	Average of nine weeks

Below are pre- and post-MRIs of an actual VAX-D patient with both a herniated disc and a degenerative disc. Before treatment, the herniated disc protruded into the spinal canal, and the degenerative disc was thin and lacking the protective cushioning that is so needed in our spine. After treatment, the once-extruded disc material has been literally "sucked" back into place, and the degenerated disc has gained impressive height.*

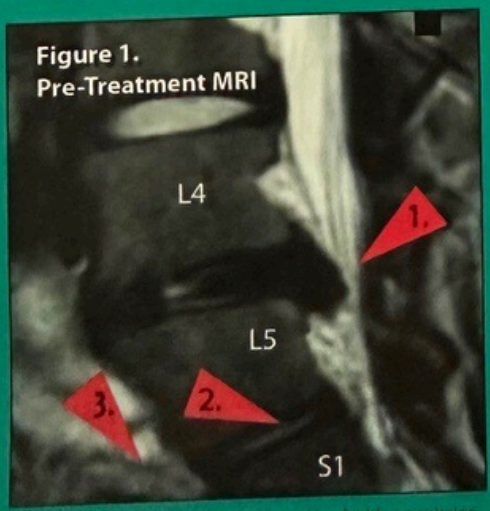


Figure 1.
Pre-Treatment MRI

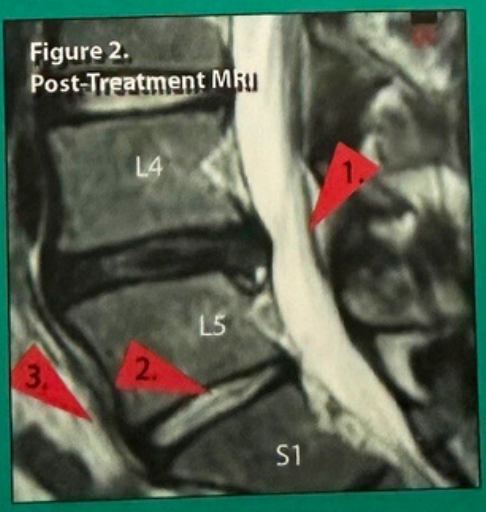


Figure 2.
Post-Treatment MRI

Before VAX-D . . .

Figure 1.

1. Severe herniation at L4–L5.
2. Degenerative disc at L5–S1.
3. Straightening due to spasm.

After VAX-D . . .

Figure 2.

1. Herniation is reduced at L4–L5.
2. Rehydration of L5–S1 disc with increase in disc height.
3. Improvement in lordotic curve.

* Individual patient results may vary.

CAUTION **Pain Medications—Special Advisory Warning:** *It may be time to reconsider how you manage your pain medication intake. In the U.S., 60 million adults take Over-The-Counter (OTC) pain relievers every day or for several days per week.[1] Ongoing use can lead to serious health risks or even death.*

OTC pain drugs should be taken at the lowest effective dose for no more than 10 days.[2]

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs): This class of drug is the most commonly used medication in the world. OTC NSAIDs include **ibuprofen** (Advil™ and Motrin™), **naproxen** (Aleve™), and **aspirin**. NSAIDs are used primarily to treat inflammation, pain, and fever, by blocking prostaglandin production. However, prostaglandins are needed to create mucosal protection for the lining of the stomach, and, if blocked, serious damage can occur. NSAIDs also inhibit platelets that help with blood coagulation and homeostasis, and can interfere with kidney function. **There is no risk-free NSAID dose (includes low-dose aspirin).**

BLACK BOX WARNINGS *The FDA's most serious warning must now appear on all prescription and OTC NSAID packaging.[3] This is the first time an OTC drug has been required to have a Black Box Warning.[4] High doses of OTC brands can be just as dangerous as prescription formulations.*

- *NSAIDs (except aspirin) may cause an increased risk of heart attack, blood clots, and stroke, which can be fatal. Risks may increase with duration of use. Cardiovascular conditions such as high blood pressure may also increase the risk.[3]*
- *NSAIDs increase the risk of serious gastrointestinal (GI) adverse events including inflammation, bleeding, ulceration, and perforation of the stomach or intestines, which can be fatal and most often occur without warning symptoms.[3]*

NSAID-Induced PUBs: *Short for Perforations (erosions of the stomach and small intestinal lining), Ulcers, and GI Bleeds, NSAID-Induced PUBs cause over 100,000 hospitalizations annually.[5] Chronic NSAID use (90+ days) showed serious damage to the small intestine in 70% of the subjects.[6] Patients over 60 with perforations have a 30% chance of dying.[7]*

Compared to non-users, NSAID users' risk for PUBs increases by:
2.5 times when taking low-dose aspirin.[4]
3 times when taking OTC ibuprofen or naproxen.[4]
10 times when taken with alcohol.[8]
12 times when combined with anti-depressants (SSRIs).[9]
13 times with previous Peptic Ulcer Disease or GI Bleed.[1]
13 times when used with anticoagulants (bloodthinners).[1]
15 times when used with Corticosteroids.[10]
25–30 times when two NSAIDs are used together.[1,7]

Acetaminophen (APAP): Tylenol™, NyQuil™, and others do not have anti-inflammatory effects like NSAIDs but are commonly taken for chronic pain. APAP is used in over 600 medications.[11]

- *Annually, acetaminophen (APAP) toxicity kills nearly 500 people and causes 56,000 ER visits, 2,600 hospitalizations, and 100,000+ calls to Poison Control Centers.[12]*
- *Overdose of acetaminophen is the leading cause of* **Acute Liver Failure (ALF).** *ALF may feel like flu symptoms over several days.[11] Coma and death can rapidly occur in one-third of ALF cases.[13]*
- *ALF can occur using the maximum 4 grams (gm) per day dose for five or more consecutive days.[12] 10% of ALF victims used 2–4 daily gm.[12]*
- *APAP causes half of all ALFs. Of these cases, 38% had combined two or more APAP-containing preparations.[13]*
- *Alcohol used with more than 2 gm of APAP can cause ALF.[13]*

Bigger Doses Don't Mean Better Relief

The analgesic ceiling effect of a drug refers to the dose beyond which there is no additional pain relief. Taking higher than the recommended dose does not yield additional pain relief, but may increase side effects. The ceiling per dose for the following meds are Ibuprofen, 400 mg; Acetaminophen, 1000 mg; Naproxen, 500 mg; Pure Opioids, no ceiling; Combination Opioids with APAP (less than 4 gm/24 hours to avoid ALF).[14,15]

Opioids: These powerful prescription narcotics are extremely addictive and may cause permanent physical changes in the brain. Commonly prescribed opioids are oxycodone (OxyContin®), hydrocodone (well-known brands Vicodin® and Lortab® contain acetaminophen), and methadone.

- *Hydrocodone caused 62% of accidental APAP-induced ALFs.*
- *In 2014, Hydrocodone was reclassified as a Schedule I controlled substance due to its highly addictive properties.[16]*
- *In 2016, 42,249 people died of opioid overdoses in America.*
- *1 in 4 people who receive prescription opioids long term in a primary care setting struggle with addiction.[19]*
- *80% of those who use heroin first misuse prescription opioid*

VAX-D: Restoring Quality of Life

A Doctor Who Is Also A VAX-D Patient

"As well as treating patients with VAX-D, I have been a recipient of VAX-D therapy myself. A few years ago, I woke up in a hotel room in Buenos Aires after a long plane ride, with excruciating neck pain. The pain was so severe that I was contemplating foregoing our trip to Patagonia and Brazil. I performed neck exercises by hanging my head over the end of the beds we slept in until we returned home. An MRI revealed degenerative disc disease at more than one level. My nurse treated my neck with VAX-D and my pain subsided within two weeks. I completed several treatments. My neck has been free of pain for several years now, and I jog six miles daily and play tennis regularly three times per week." **Ronald Peroff, MD — Medical Doctor**

VAX-D for Neck Pain

"I was suffering with a large cervical disc herniation. This herniation caused severe pain in my shoulder and arm, and numbness in my hand and fingers. The pain had been gradually getting worse. I had tried chiropractic, massage, and various other therapies but my pain did not decrease. I wasn't able to ride my horse or workout, and I had to decrease my hours at my job. I went many nights without sleeping due to the pain. Surgery and pain management were my only options. I did not want to have surgery. I then began the VAX-D therapy for the neck and cervical region. Within one week of VAX-D, I had a decrease of pain in my shoulder and arm. At the completion of my VAX-D treatments I was pain free! I was back to riding my horse and going to the gym. After fearing that I would never have the active lifestyle that I had always enjoyed, VAX-D got me back to doing everything I used to do. I am so grateful to VAX-D for changing my life!" **Traci R. — VAX-D Patient**

Amazing Results with VAX-D

"As a physical therapist, I am grateful that I found VAX-D therapy 12 years ago. I have treated over 1,000 patients with VAX-D, with amazing results. In my professional opinion, there is no treatment that compares to VAX-D as a conservative treatment for patients suffering from bulging, herniated, and degenerative discs, facet syndrome, and relapses following surgical interventions. VAX-D therapy should be the initial treatment for these patients and should always be tried prior to any surgical intervention." **Melissa Hourihan, PT — Physical Therapist**

After 20 Years, Finally, Relief!

"I have had back issues for more than 20 years. I went for an MRI and was diagnosed with a herniated disc. I did not want to go through having back surgery, so I underwent VAX-D therapy combined with rehabilitation instead. That was six years ago. My back problems are so much better. I have flexibility and can do things I could not do before the VAX-D treatment. I recommend this procedure to anyone who has back problems. **Dennis G. — VAX-D Patient**

VAX-D Clinical Studies & Publications

Peer-Reviewed and Published in Respected Medical Journals:

Archives of Physical Medicine (Vol. 89, Issue 2, Pages 269-274, February 2008)

Outcomes after a Prone Lumbar Traction Protocol for Patients with Activity-Limiting Low Back Pain: A Prospective Case Series Study,
Archives of Physical Medicine. *Paul F. Beattie, PhD, PT, OCS, Roger M. Nelson, PhD, PT, Lori A. Michener, PhD, PT, ATC, SCS, Joseph Cammarata, DC, Jonathan Donley, DPT*
OUTCOME: *On the 180-day follow-up, patients reported significantly improved pain after 16 to 24 daily VAX-D treatment sessions.*

Journal of Orthopedic & Sports Physical Therapy (Vol. 35, No.1, January 2005)

Short and Long-term Outcomes Following Treatment with the Vax-D Protocol for Patients with Chronic, Activity-limiting Low Back Pain
P.F. Beattie, PT, PhD, OCS; R. Nelson, MS, PhD; L. Michener, PT, PhD; J. Cammaratta, BS, DC; J. Donelly.
OUTCOME: *Significant improvements were reported in a sample of 118 patients with unfavorable prognosis due to chronic low back pain.*

Journal of Neurological Research (Vol. 26, April 2004)

Efficacy of Vertebral Axial Decompression on Chronic Low Back Pain: Study of Dosage Regimen. *Dr. Gustavo Ramos, MD.*
OUTCOME: *This 142 patient study showed 76% achieved remission of pain with 18 treatment sessions,versus 43% remission with 9 treatments. Except in emergent conditions, VAX-D should be utilized before surgery is undertaken. Success correlates with number of sessions administered.*

Journal of Neurological Research (Vol. 23, No. 7, October 2001)

Dermatomal Somatosensory Evoked Potential Demonstration of Nerve Root Decompression after VAX-D Therapy.
William Naguszewski, MD; Robert Naguszewski, MD; Earl Gose, PhD.
OUTCOME: *Of the study group, 77% reported pain reduction with successful decompression of the nerve roots at multiple levels.*

Neurological Research Journal (Vol. 23, p. 780-784, October 2001)

A Prospective Randomized Controlled Study of VAX-D and TENS for the Treatment of Chronic Low Back Pain.
Eugene Sherry, MD, FRACS; Peter Kitchener, MD, FRANZCR; Russell Smart, MB, ChB.
OUTCOME: *VAX-D treatment obtained a statistically significant reduction in pain and improvement in functional outcome in patients with disc-related chronic low back pain. TENS treatment recorded 0% improvement, while VAX-D treatment yielded a success rate of 68.4%.*

Canadian Journal of Clinical Medicine (Vol. 6, No. 1, January 1999)

An Overview of Vertebral Axial Decompression. *Frank Tilaro, MD*
OUTCOME: *Average pain reduction in patients after VAX-D treatment was 77%.*

Canadian Journal of Clinical Medicine (Vol. 5, No.1, January 1998)

The Effects of VAX-D on Sensory Nerve Dysfunction in Patients with Low Back Pain and Radiculopathy. *Frank Tilaro, MD; Dennis Miscovich, MD.*
OUTCOME: *VAX-D can significantly influence sensory nerve dysfunction associated w/compressive radiculopathy. Complete remission was achieved by 64% of the study group.*

Journal of Neurological Research (Vol. 20, No. 3, April 1998)

VAX-D Therapy for Pain Associated with Herniated or Degenerative Discs or Facet Syndrome: An Outcome Study.
Earl Gose, PhD; William Naguszewski, MD; Robert Naguszewski, MD.
OUTCOME: *In 778 cases, VAX-D achieved a success rate of 71%. The authors view VAX-D as a primary modality for low back pain for lumbar herniations, degenerative discs, facet syndrome, and decreased spinal mobility.*

Journal of Neurosurgery (Vol. 81: No. 3, 1994)

Effects of VAX-D on Intradiscal Pressure.
Gustavoo Ramos, MD; William Martin, MD.
OUTCOME: *VAX-D creates a negative intradiscal pressure force as low as -160 mmHg.*

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More Doctors Talk About VAX-D

"VAX-D adds a new dimension to my practice by allowing me to non-invasively treat patient neck and back injuries that otherwise might require surgery. It also addresses the disc areas of neck and back pain that I cannot reach with prolotherapy injections. Further, combining VAX-D with other therapies, creates a synergistic approach that increases our patients' chances of complete recovery from pain and return to function." **Daniel Royal, DO — Osteopathic Physician**

"I have treated literally hundreds of patients over the years from ages 17 to 84 with this revolutionary, non-invasive, non-surgical and non-drug treatment. The addition of a VAX-D clinic to my practice in 1999 clinically has been a most impressive and rewarding experience. I am thrilled to offer a treatment that has led to a reduction in use of many medications and an increase in quality of life."

Gerald B. Weiss, MD — Physician, Board Certified in Neurology & Pain Medicine, Back Pain Specialist

"I've never found anything to work so well for back pain patients in my 39 years in medicine. VAX-D changes people's lives and frees them from the misery of chronic low back conditions. It repairs damaged discs that cause excruciating back pain and sciatica. We have been able to fix the post-surgical train wrecks that no one else could repair. VAX-D should be used before surgery. VAX-D has lowered patients' needs for pain medicines—and that is a good thing."

E. Michael Gutman, MD — Physician, Pain Specialist, Forensic Neuropsychiatrist

"Before using VAX-D in my clinic, my back pain patients used conventional treatments such as prescription pain medications, epidural injections, facet blocks, nerve blocks, physical therapy, and chiropractic. None of those treatments gave the positive results that my patients are having with Vertebral Axial Decompression. My patients and I are very pleased with the outcomes. I strongly recommend VAX-D to my back pain patients prior to undergoing any aggressive surgical procedures. Of the patients we have treated with VAX-D, some return for a maintenance treatment, but the majority continue to be pain free years later." **Dr. Terry Fowler, DO, PhD — Family Practice Osteopathic Physician**

"When I first saw the VAX-D system, I had to find out if it worked because what the manufacturers were claiming was revolutionary and exciting. If the claims were legitimate, I could help my patients without injections or surgery. What a dream come true! I looked at the medical studies performed on VAX-D, as well as their patents. I spoke with physicians who used VAX-D on their patients. However, nothing compared to discovering for myself through using VAX-D in my own practice, that it works and can be the miracle cure that people are looking for." **Ali Mohamed, MD — Physician, Interventional Pain Management, Anesthesiologist**

We have used VAX-D in our offices for over twenty years. With this non-invasive, non-surgical treatment we have greatly improved thousands of disc related cases—all without worsening the condition of any patients. We have helped professional athletes and celebrities from all over the country as well as patients with multiple failed back surgeries. **Peter G. Peduzzi, DC — Chiropractic Physician**

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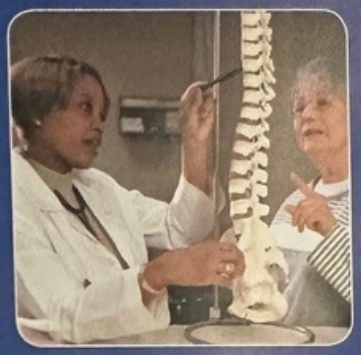

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