

GET THE ROOT

Why So Many Back Pain Treatments Fail
& How to Get Relief

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By
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Mission Statement

Give the best care possible by providing an accurate diagnosis and appropriate treatments, to help people avoid addictive drugs, injections and surgeries.

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Foreword by Dr. Taylor

As a child I remember many times having to pull weeds in the yard. I remember my Mom saying **“Be sure you get the root! If you just rip the top off it will grow right back and we’ll have to do this over again.”**

As I work with patients I see the adverse effects that so many common back pain treatments have. They may provide temporary relief, but the pain always returns, and unfortunately it often leads to increased injury and pain.

I have spent a lot of time writing and revising this book. I have written it because of my desire to help others with back and neck pain. I too have a history of back pain, so I know first-hand how debilitating it can be.

This book is not written for the person that has an occasional “sore back” after working in the yard over the weekend. Instead, it is written to help people understand some of the more severe conditions that cause back and neck pain, and know what options are available to them, without having to turn to addictive drugs, injections or worse; surgery.

Using my dry sense of humor, I have tried to inject some fun wherever possible, to make it both informative and humorous.

I hope you enjoy reading it, and even more, I hope you learn from reading it!

Dr. Raymond Taylor

Chapter 1

My Journey

This whole first chapter is my personal story. You don't need to read it, but if you're curious about my history and what drove me to become a doctor, read on! Otherwise, you can skip to chapter 2 right now and I won't be offended.

I had a normal, happy childhood, growing up in the suburbs of Phoenix, AZ, in a city called Mesa. Both of my parents had to work to support our family, so I became a rather independent oldest child. I've always been a hard worker, with a strong desire to support myself. I had my first job delivering free coupon "newspapers" when I was 12 years old and I've been working ever since.

I got my first "real job" just before I turned 16, working at the Dairy Queen (my Mom was the manager). It didn't take long before I noticed that my back wasn't too happy with me after working on my feet for 6 hour shifts, running around like a madman. I had friends that worked there too, and they would complain that they were tired after work, but they didn't have pain like me.

Being a teenage boy, I simply kept all this to myself. I just assumed I was being a wimp and that it would get better with time. It didn't.

Fast forward many years and many low back pain episodes later to adulthood. By this time I had become very familiar with my pain patterns and triggers. I had come to accept that I simply had a bad back and I never did anything about it. I would tend to throw my back out about once every couple of months, and it simply became part of my life.

When I'd have an episode I found that I could lie on my back, put my legs up on a chair and rest for a day or two and then I would slowly make my way back to normal in about a week. The pain would be so bad that I could barely walk sometimes. I'd hunch over and shuffle around. I've never been fond of taking medication, so I tried to avoid those and simply rest my way back to normal.

There was one time when I was having an especially bad few months, with multiple episodes, very close to each other. I felt like I was down more than I was up. I owned my own sign and graphics shop, so I had to get the work done, regardless of how I felt. It was brutal and very painful. I decided I had to do something, so I talked to a chiropractor friend from church. He thought he could help me, so we worked out a trade; I did some graphics for his office and he gave me 3 visits in his office. It seemed like a fair trade and I needed all the help I could get.

Now, I know what you're thinking.... I went to see him for those 3 visits and a miracle happened.... he cured me and that's what motivated me to become a chiropractor and devote my own life to helping people.

Ha! I wish! That would've been a really cool story to tell. Instead, this is how it really happened...

On my first visit he asked me where it was hurting, how long, etc. He poked and prodded a bit, then had me lay down on his table to get to work. He then proceeded to push, pop and twist all up and

down my spine and neck. It felt really good, but literally by the time I was pulling out of the parking lot, the pain had already started to come back.

I went back for my two other visits, each with the same treatment and same outcome. It would feel good for a few minutes, and then the pain would return before I even got home. Needless to say I was not too excited about the benefits of chiropractic care at that point.

Now you may be thinking that all of that was a bad experience, but even though it didn't end the way I wanted it to, it was still a very valuable experience and one of the major reasons you're reading this book right now.

Shortly after all of this, my wife decided she would like to become a massage therapist, so she started school and started to practice her new skills on me. As she practiced on me, I was able to find relief for the first time. I learned that part of my pain was coming from tight muscles and that massage could help. I was still throwing my back out multiple times a year, but at least now I had someone I could turn to for help, and help it did. My down time would be cut in half with the massage work, but it was still happening and I had no idea why.

Fast forward even more...my sign shop had become quite successful and I was a very busy person, working 60-80 hours a week and running myself into the ground. I was in pain frequently and my wife kept me going with regular massage work to put me back together again. I was making a lot of money, but I was miserable, not just from the pain, I wanted out of my business. I began searching for a new career, something that would be rewarding and fulfilling. I had no idea what that would be, but I thought about it for many years.

One day after a particularly long and grueling day of work I came home and complained about my back pain to my wife. She quickly sat up and said “you should be a chiropractor!” Eureka! It was like the heavens had opened and given me the answer to what I had been searching for all these years.

From that very moment I knew that was what I needed to do. I had suffered with low back pain my whole life. I wanted to learn why, and more importantly, I wanted to know how to fix it, and be able to help others do the same. I decided right then and there that I wanted to help people like me, and I wanted to do it differently than I had experienced with other doctors.

Over the years I had been to see chiropractors, medical doctors and physical therapists. It seemed each time they were never very concerned about me or what I had to say. They seemed to make a lot of assumptions about me and my condition, and then treat me according to their assumptions.

I have enjoyed working on cars my whole life. The thing about cars is that they either work right or they don't. If something goes wrong with a car, it is imperative that you diagnose the problem accurately. You have to look at the “symptoms” that the car is showing, and know what they mean in order to be able to quickly and cost efficiently fix it. If you mis-diagnose the car, and “fix” something that isn't the problem, nothing changes and you're left scratching your head.

What I learned in school is that people aren't really much different than cars. We're very machine-like, and when something goes wrong, our bodies present symptoms just like a broken vehicle. On that night so many years ago I determined that I would become a doctor and I would treat people just like I would a car, meaning, I would learn to properly diagnose the problem and then learn how to fix it.

I've since learned that humans are not as simple as cars. Sometimes it can be much more difficult to diagnose a person than it is a car. Also, unfortunately, people are not always easy to repair. We can't simply buy a new part, install it and have a perfectly functioning body again. This is especially true with spinal care. There are countless problems that a person may have, many of which present in a very similar fashion, making proper diagnosis difficult.

To wrap up the story of my journey, you're probably wondering what happened with my back problems. To be brief, once I started chiropractic school I became a patient for other students that were close to graduation. The first student doctor I had took x-rays of my spine, and the reason for my life-long pain was finally discovered. Prior to this, nobody had ever taken the time to x-ray my spine and actually look at it to see what was wrong.

As it turns out, I have a condition called anterior spondylolisthesis, which is basically when one vertebra slips forward over another. The only possible way to fix it is with surgery, but with a less than 50% success rate for spinal surgery, that's not a gamble I'm willing to make. However, I've learned that it can be managed, mainly through a strict exercise protocol and weight management program that I've developed for myself.

It frustrates me that I suffered all those years with back pain because nobody bothered to do a thorough examination and try to properly diagnose what was wrong with me. Needless to say, I've learned a lot through my own experiences and my own journey. The Mission Statement in the front of this book is from my own heart. I wrote it and I live by it. I believe that the best care starts with the best diagnosis. I can't fix anything if I don't know what's broken.

Chapter 2

Pain is NEVER the problem!

As we begin this educational journey, I want to emphasize one very important fact...

Pain is NEVER the problem!

You have pain, right? It may be neck or low back pain, arm or leg pain, sciatica, burning, tingling and the list goes on. All of these are symptoms, they are NOT your problem. Pain is never the problem.

Webster's definition of the word - **Symptom: Something that indicates the existence of something else.** Symptoms simply tell you that there is a problem somewhere.

Here's a humorous story to illustrate the difference between symptoms and problems:

There was a man with an old sports car that he loved to drive on the weekends. One day he noticed that there was a small puddle of oil under the car. He made a mental note that he should bring it to a mechanic soon, but already had plans for a road trip that day, so away he went.

On the way home from his trip, the "check engine" light came on, and he assumed that it was probably related to

the oil he found on the garage floor, so he pulled over and called a tow truck.

Once at the shop, the mechanic asked “well, what seems to be the problem?” The man went on to tell him, “I went to take my car out for a drive and found a small puddle on the garage floor. I figured it would probably be okay, so I took it for a drive, but on my way home the check engine light came on.”

The mechanic said he would need the car for a couple days to work on it. The man agreed to leave his car and went home to clean up the oil spill.

A few days later the mechanic called and told him that his car was ready to be picked up.

The next weekend he excitedly pulled his car out of the garage. As expected, there wasn't a drop of oil on the garage floor. Glad to have his car back he went out for an amazing drive through the canyon back roads.

However, his fun was short-lived. After about an hour of carving through the backroads, his car started to shudder and make loud knocking noises. He pulled over immediately and popped the hood.

Smoke came billowing out of the hood and he knew something was terribly wrong. He called another tow truck, but this time he had it towed to a different mechanic to see what was wrong.

The second mechanic told him that he would need a couple of days before he could get to the car, but that he would do a thorough evaluation and let him know what was wrong and what it would take to fix.

A couple of days later the mechanic called and asked who had been working on the car recently. The man replied that he had recently taken it to another shop for the leaking oil and the check engine light, and that everything had been fixed.

Shocked and in disbelief he proceeded to tell the owner what he had found. "Well..." he said, "you need to have a serious talk with your mechanic. The first thing I did was to check your fluid levels. Everything was fine except your oil, which was almost bone dry."

"Next I looked under the car to see where the oil was leaking from and discovered a large metal pan strapped to the bottom of the engine. It was almost full of oil. I carefully removed it and discovered that oil was still leaking from the bottom of your engine. I can only assume the pan was put there to catch the drips."

"I've never seen anything like that in my life, is that what you told him to do?" he asked. "No, of course not" replied the owner, "I told him that I found a puddle of oil in the garage and that my check engine light came on later."

Laughing, the mechanic said "well, that explains the next thing I found.... So after finding all of this, I wondered why the check engine light didn't come on to warn you of the problem. Upon inspection, I found that the check engine light bulb had been removed from your dashboard."

"The good news is now we know what the real problem was, but the bad news is that your engine is completely seized up and will need to be replaced. What should have been a \$300 repair is now going to cost about \$5000."

I know this is a humorous example, but it illustrates the difference between symptoms and problems perfectly.

The puddle of oil on the floor wasn't the problem. The check engine light wasn't the problem either; they were both just symptoms of the real problem. Adding a drip pan and removing the light bulb didn't solve the underlying problem, they just hid the real problem by eliminating the symptoms temporarily.

Unfortunately for the car owner, the real problem was never fixed, and because the mechanic "fixed" the symptoms of oil spilling and a check engine light, the owner believed that everything was okay, and he ended up causing severe damage to his car.

Pain is NEVER the problem. Pain is just a SYMPTOM.

So, if you have neck or back pain, there is always an underlying cause of that pain, a root cause that must be identified in order to eliminate the pain as much as possible.

Chapter 3

Spinal Anatomy 101

Now is the perfect time for a quick anatomy lesson to get a basic understanding of the spine and its moving parts.

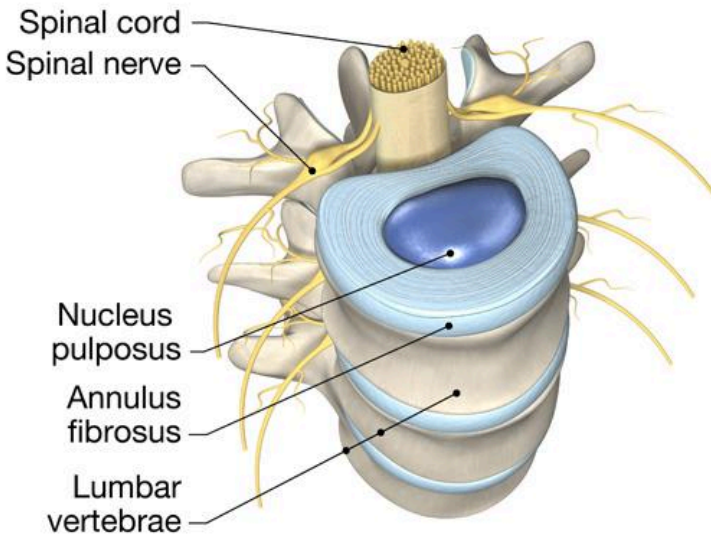


Image 1

A spinal disc has three basic parts, the nucleus pulposus (inner gelatinous part), the annulus fibrosus (15-25 outer fibrous rings), and the cartilaginous endplates that anchor the discs to the adjacent vertebrae.¹

I love car analogies, especially comparing discs to car tires. I bet you didn't know this about car tires... they are actually constructed the same way as spinal discs!

Both the annulus and the radial plies of a tire have alternating, diagonal layers to provide maximum strength and still allow flexibility.¹ I don't know if that is a coincidence or if tire companies copied the disc anatomy, but either way, it makes my analogies more fun.

The spinal disc acts as a shock absorber¹ between the bones (vertebrae) of your spine. Each disc is sandwiched in between two vertebrae. In the same area where the disc is, there is a pair of spinal nerves which branch off of the spinal cord and exit between the vertebrae on the sides. (See the **Image 1**) These nerves then travel down your arms (from the neck) or legs (from the low-back). This is why you may have arm or leg pain when you have a disc problem.

The spinal disc is unique and AWESOME! It provides flexibility, range of motion and shock absorption! Without your discs, you would be a very rigid and inflexible person.

A fun fact about spinal discs is that they are mostly made of water, with 66-86% water content.¹ However, they have a very limited blood supply,² so you are probably wondering "how do they stay hydrated without blood flow?"

Great question! Their main source of hydration is through a process called imbibition.³ Imbibition is very similar to osmosis and diffusion. It is when a solid or semi-solid tissue absorbs water into itself from its surroundings. A great example of this would be a wooden door that swells up with water when it gets wet.

Imbibition occurs constantly, but during our waking hours, we spend our time doing activities that put lots of pressure on the discs, such as sitting, standing, bending, lifting, twisting, walking, etc.⁴ All day long our discs are fighting an uphill battle to stay hydrated.^{4,5,6}

The magic happens at night when we sleep. That's when imbibition gets to do its thing, without interruption. As you lay down, the downward pressure comes off your spine and the discs are able to decompress and the imbibition process goes into hyper-drive, pulling water back into the discs.^{7,8}

Now that you have a better understanding of what a spinal disc is and how it stays hydrated, we can dig in and figure out what's really going on and what the real problem is, because we know that it's not pain!

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Chapter 4

The Root Cause

As noted in the introduction, the title for this book was inspired by my Mom. She taught that if we pull a weed, but don't get the root of the weed, then it will grow right back.

In the case of low back pain, there are lots of potential causes; however, in the most severe cases of back pain, there is often one root cause. One thing; that if resolved; can undo the pain that it is causing.

In this chapter I will review the most common conditions that I see daily in my practice. I will briefly describe each and then uncover the common root cause of all of them.

The job of a doctor is much like that of the mechanic in my story. They need to not only recognize the symptoms (dripping oil and check engine lights), but also be able to identify the root cause of the problem (cracked gasket).

What I've observed over the years in my practice is that most people don't ever have just one problem. Usually, they have a series of problems that are related to each other, and they all combine and keep the person in pain.

My job is to identify ALL of the problems (leaks) so that we (you and I) can work to resolve them and help you feel better. If you're reading this book, it's because you probably have some pretty serious issues going on.

What I want for you is to get relief of pain, without having to take drugs, have injections or worse, spinal surgery.

I used the story about the mechanic to illustrate the difference between symptoms and problems. I imagine that you've tried a few different "mechanics" to try and fix your back pain, and most likely have been labeled with one or more "diagnoses" or "conditions" and were told that they were your problem.

The following is a list of the most common conditions I see every day in my practice:

- Degenerative disc disease (DDD)
- Spondylosis
- Facet hypertrophy
- Bulging disc
- Disc protrusion (herniation)
- Canal stenosis
- Foraminal stenosis
- Radiculopathy

I would be willing to bet a dollar that you have been diagnosed with at least one of these, if not two, three, or more, and that your doctor told you that was what your problem was.

Well, all of these conditions are problematic, that's for sure.

However, I would say that NONE of them are your real problem.

In fact, I would say that ALL of them are merely symptoms of something else.

I'm willing to bet five dollars that nobody has ever told you that before!

Although the conditions listed may seem unique and different, I'm here to tell you that they almost always have the **same root cause**.

There is one exception to my rule, and that would be if a bulging or protruded disc was caused by some sort of traumatic event like a car accident or major fall. So, excluding major trauma, all of the cases I see have the same root cause.

Remember in chapter 3 we learned how discs stay hydrated and healthy? **Imbibition!**

Like so many other bodily processes, imbibition slows down as we age.¹ Our discs are not able to absorb as much water as they used to, and they slowly lose water and nutrients over the years. The inner nucleus turns more fibrous and the outer annulus starts to break down.²

"But, I'm only 25! Why do I have disc problems?" you may be asking yourself. It's easy to see why an "old person" could have these problems, but why do "young people". That's a great question, and I don't have a solid answer, however there is research to suggest that genetics may be to blame.^{3,4}

I see patients of all ages; and many times they have very healthy discs for the most part... except for one that is extremely bad for whatever reason. Sometimes genetics are to blame and it's as simple as that.

So whether poor genetics are to blame, or the aging process, the root cause of all the conditions I listed on the previous page remains the same... **Poor imbibition!**

Basically when imbibition slows or is dysfunctional, the disc becomes desiccated (dehydrated) and unhealthy. The disc is a lot like a car tire, it loses water (not air) and “goes flat”.

It's the going flat part that causes many of the problems. A disc should be big and puffy, filled with water. This is how God designed it to work. When a disc dries out and goes flat, it changes everything!

You may not believe me, because you've never been told this before, so I'll explain how a dehydrated, unhealthy disc is the root cause of each condition listed previously.

Degenerative Disc Disease (DDD):

Let's start with Degenerative Disc Disease (DDD), as this is the most common condition I see. First off, let me say that I really don't like the name “degenerative disc disease”; it isn't a disease at all, but rather a normal progressive condition that typically affects the majority of people as we age.⁵

DDD is basically a drying out or desiccation of the disc. As we have already learned, this happens due to poor imbibition of the disc. Typically it is seen throughout the spine, but it can also be isolated to only a few discs at a time. It is usually not a problem, unless it gets severe enough, then it can cause pain as the outer layers of the disc dry out, tear and cause pain.

DDD is extremely common, and usually asymptomatic, which means that most people that have it are unaware. One study of over 1000 subjects found that as many as 40% of people under 30 years of age had DDD, and more than 90% did by age 55.⁵

With DDD it is easy to see how it is caused by reduced imbibition. Once imbibition slows or stops, dehydration starts to occur and creates the condition we know as DDD. Pretty simple.

Spondylosis:

The next condition on the list is Spondylosis (sometimes called spinal osteoarthritis). It may be hard to pronounce, but spondylosis is a fairly easy concept to understand.

It is a bony change that is directly tied to DDD. Remember how with DDD the disc gets “flat” like a tire as it loses water content? Just like the car tire, as it goes flat it gets wider. As it widens, the vertebrae actually grow new bone and become wider at the edges where the disc is; to match the new width of the flat disc.

Spondylosis and DDD go hand in hand. Once you have DDD, the spondylotic changes will start to happen simultaneously. The reason for this is stability. Have you ever driven on a completely flat tire? Your car will feel like it is slipping all over the place, especially when you make a turn.

Your spinal discs are the same; as they lose their water content, they lose some of their rigidity and create instability in the spine. The body compensates for the instability by adding new bone to the vertebrae in an effort to increase the stability of the spinal column. These bony growths are called osteophytes or in common terms; bone spurs.

Spondylosis becomes problematic when the osteophytes have become so overgrown that they start to put pressure on the spinal cord or the nerves as they exit the spinal column.

Once osteophytes have formed, the body will typically not resorb them, so they are considered permanent. If your MRI radiology report indicates that you have severe spondylosis or osteophyte formation, it may or may not be contributing to the pain you are having. A thorough review of your MRI is the only way to know for sure.

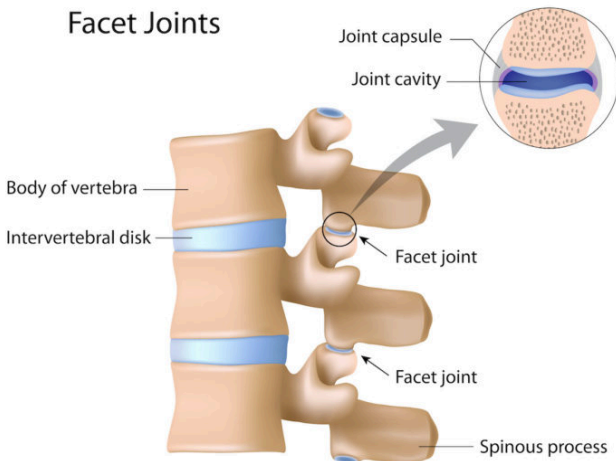
So what is the root cause of spondylosis? Let's follow the sequence of events...first, a lack of proper imbibition and hydration leads to DDD, which in turn causes spondylosis and formation of osteophytes.

Facet Hypertrophy:

Next, let's talk about the facets. Facet joints are on the back of your vertebrae. Generally speaking, there are two facet joints (right and left) at each spinal level. The facets act to stabilize and limit the range of motion of the spine.

In its simplest terms, facet hypertrophy is a swelling of the facet joints, caused by excessive compression or abuse of the joints. As the condition progresses, it will lead to the formation of osteophytes that can grow into the spinal canal and put pressure on the spinal cord or the nerve roots of the spine.

“What causes it to happen?” you may ask. As stated above, it starts with compressive forces being applied to the facet joints. Let's have a look at the image below, as it will help us understand the relationship between the facets and the disc.



As you can see by looking at the structure of the spine, the facet joints are directly affected by the height of the spinal discs. If a disc becomes dehydrated and compressed, it directly affects the joint space in the facets, and they too will be compressed. This is the most common source of “compression and abuse” of the facets. Just like spondylosis, once the bony changes have occurred, they will be permanent.

So it is fairly easy to see how poor imbibition of the spinal disc is the root cause, which leads to excessive compression of the facets joints, leading to hypertrophy of the joint and eventual osteophyte formation.

At this point you are probably starting to see how a person could easily collect a long list of conditions in their spine. Because they all have the same root cause, it is extremely common to see people with nearly all of these conditions at the same time.

Disc Bulges and Protrusions:

Okay, let's keep going, isn't this fun to learn new things? Let's talk about disc bulges and disc protrusions (herniations). These are two different conditions, but because they are so similar I will combine them into the same section.

Bulges and protrusions can happen suddenly from a traumatic event, or they can happen gradually over time. I'm going to focus on the slow method, which is what I see most commonly in my practice.

Remember from our anatomy lesson that the disc has two major parts, the inner nucleus that is jelly-like, and the outer fibrous wall that keeps the nucleus where it belongs. The disc is mostly water, with 66-86% water content.

Just like all the other conditions we've talked about so far, disc bulges and protrusions are initially caused by poor imbibition of the disc.

As a disc dries out, loses nutrients and becomes unhealthy, the outer fibrous layers of the disc start to break down and/or become less flexible.

This deterioration leads to small tears forming in the layers of the annulus (the annulus fibrosus typically has 15-25 layers). Just like a tire, if some of the layers start to tear, it will create a thin spot in the disc, which will then bulge outward, putting pressure on the nearby nerves. This condition is what is referred to as a disc bulge and it is usually less severe than a protrusion.

The next progression is a protrusion, which may also be called a herniation or ruptured disc. A protrusion is when there is a complete tear in the annulus and the inner nucleus starts to leak out of the disc and put pressure on the nearby nerves. This is much more severe than a bulge and is usually more difficult to treat than a bulge.

Bulges and protrusions are fairly common, but not always symptomatic. They become problematic when they bulge or protrude too much, and start to put pressure on the spinal cord or the nerve roots. When this happens, you will start to feel pain down your arms or legs because that is where the nerves go after they leave the spinal cord.

Regardless if you have a bulge or a protrusion, the underlying cause is the same, they both start with poor imbibition in the disc, which then loses water and nutrients and starts to break down.

Canal stenosis and Foraminal stenosis:

Let's move on to canal stenosis and foraminal stenosis. These terms are not technically diagnostic terms, they are actually just

descriptive terms. Let's look at what they literally mean and you'll understand what I'm saying.

The dictionary states: "**Stenosis - a narrowing or constriction of the diameter of a bodily passage or orifice.**" (Merriam-Webster online dictionary) Stenosis simply means "narrowing", so in this case it is referring to the narrowing of the spinal canal (canal stenosis) or the narrowing of the foramina (foraminal stenosis).

For some context, the spinal canal is where your spinal cord runs up and down your spine, it is formed by holes in each of the vertebrae that create a tube or canal that your cord passes through. The foramina are the "side holes" that are formed on the sides in between two vertebrae, and this is where nerve roots branch off of your spinal cord.

When reading your radiology report, whenever you see the word stenosis, remember that it is simply a word used to describe what is happening in your spine. It is always caused by something, and that something is what really matters. Most of the time, the radiologist will state the condition that is causing the stenosis, but I have seen some reports where they only list the stenosis without stating the cause.

Stenosis is typically caused by two primary methods: osteophyte formation (from spondylosis or facet hypertrophy) or when the disc itself fills these openings from bulges or protrusions.

Even though stenosis isn't really a condition, we can still see how it is typically caused by conditions that all have the same root cause.... poor imbibition!

Radiculopathy:

Radiculopathy, the last item on the list can be confusing because of the way it is sometimes used by doctors. I consider it more of a symptom, but many doctors talk about it as a separate condition.

“Radiculopathy - irritation of or injury to a spinal nerve root (as from being compressed) that typically causes pain, numbness, or muscle weakness in the part of the body which is supplied with nerves from that root.” (Merriam-Webster online dictionary)

It is technically a condition, because it can cause injury to a nerve root or another part of the body, but it never occurs in isolation; a compressive force **must** be present to cause the radicular symptom, so that’s why I always look at it as a symptom, and not a separate condition.

Regardless of your viewpoint of it being a symptom or condition, the underlying cause is what matters most. Radiculopathy is always caused by something putting pressure on the nerve, so if we go back and look at our list, we can see that many of these conditions we’ve discussed can cause radiculopathy.

(It is important to note that the most common causes of radiculopathy are the things we’ve already discussed; bulges, protrusions, spondylosis, facet degeneration and even severe DDD. However, there are some less common conditions that you should be aware of too. Tumors, cysts, spinal fractures or infection can also cause radiculopathy. An MRI is the best diagnostic tool to be able to discover what is causing the radiculopathy to know how to treat it.)

So, it is easy to see that for a large majority of cases, radiculopathy is caused by one of the conditions we’ve discussed, and thus, it too is ultimately caused by a lack of proper imbibition and drying out of the disc.

Good job sticking with me to this point! I realize that not everyone cares about these things as much as I do, but as a doctor, I feel it is my job to educate.

Now that I've laid it all out in black and white, hopefully you have a better understanding about your condition(s), but more importantly, hopefully now you can see the underlying cause of it all.

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Chapter 5

Why Treatments Fail

Note from Dr. Taylor: I have spent a lot of time writing and revising this book, and because it is my passion, I could literally go on for days talking about these topics. I have done my best to keep it as short as possible, however, this chapter is still quite long. I'd love for you to read it, because I've spent so much time writing it, but I also value your time.

So, if you want to learn what the most common treatments are, why they are used, and why they fail to deliver lasting results, read the whole chapter. For the rest of you, here is the basic premise of this chapter:

The underlying cause of all the conditions listed in this book is a lack of proper imbibition. Any treatment that fails to improve imbibition will fail to get results. None of the common treatments you've probably already tried accomplish this. You may now skip to chapter 6 if you wish.

Now that we have a better understanding about these common conditions and how they share the same root cause, it will be easy to see why the most popular treatment options often fall short. I see so many patients that are very skeptical about any treatment

because they have already tried so many, and have been disappointed so many times.

Before we get too deep into the subject, I want to make something very clear, I mean no offense to any doctor or medical provider that uses these treatment procedures to help their patients.

There is something called the “standard of care” in the medical community, and all health care providers must follow the procedures that are commonly accepted as “standard practice”. What this means is that doctors are limited in what they can do. If the standard of care dictates that a certain type of medication is to be prescribed for a given condition, and a doctor deviates from this standard and instead offers some herbal supplement, they open themselves up to potential lawsuits and even the risk of losing their license.

When it comes to low-back or neck pain, there are standards that doctors are expected to follow there also, even if those methods are ineffective at identifying or addressing the root cause.

What’s worse is that doctors are further limited by insurance companies. The unfortunate reality of our current healthcare system is that doctors aren’t really the ones making the final decisions for their patients’ care. They may know what treatments would be best for their patients, but they are severely limited by what insurance companies are willing to pay for. For the most part, insurance companies are not usually quick to embrace new technologies and treatment procedures.

Okay, so let’s dive right in! In this chapter I will take a similar approach to the last chapter, explaining one by one the most common treatment methods and give my opinion as to why they are often unsuccessful at providing relief.

Remember my story about the mechanic? The problem was that he never tried to figure out the cause of the oil leak. He was so focused on the “symptoms” and trying to resolve those, that he completely missed the real problem.

A similar situation happens quite frequently in doctors’ offices across the nation. Not because the doctors are idiots like the mechanic, but because the standard of care dictates that you are supposed to look at the symptoms that a patient exhibits, and then treat them according to their symptoms.

Pain Medication:

This is usually the first method employed for treating neck or back pain. The reason for this is because of the focus on symptoms instead of causes; the standard of care dictates that the symptom of pain be treated by pain medications.

Most people realize that pain medication is not a cure for whatever is causing their back pain. They understand it is only masking the real problem. The hope of both doctor and patient is that the medication will provide enough relief for long enough that the underlying issue will resolve on its own over time.

For some minor issues, such as sprains and strains, this method can be very effective. However, for more serious issues, such as those discussed in the last chapter, medications will simply mask the real problem and actually put the patient at risk for more serious injury.

Remember back to chapter 2? Pain is never the problem! Pain is a warning, to keep you from doing more damage. Let’s use the example of touching a hot stove. The second you touch a hot stove, your hand sends a pain signal to the brain, which then sends a signal back to your arm muscles to move the hand away from the stove so you don’t get burned worse.

What would happen if you couldn't feel pain in your hand? You could possibly cause serious damage without that warning signal.

When you block your body's pain signals you may feel better in the short term, but you risk causing more damage to your spine.

The reason medication fails so often, is because it only covers up the real problem and in no way addresses the real root cause.

Physical Therapy:

After medication fails, often the next method used is to send the patient for physical therapy (PT). Physical therapy is great. The focus is on stretching and/or strengthening parts of the body to resolve painful conditions or to speed up recovery after surgery.

The thing that I like most about PT is that physical therapists usually don't focus on treating symptoms, they try to get to the source of the problem and fix that. I am a strong supporter of physical therapy, and I use a lot of stretching and strengthening in my clinic as well to help patients.

In fact, as part of our spinal disc treatments, I work with my patients to help improve their core strength. However, core strengthening is just a part of the care, and is more of a preventative measure than it is curative when it comes to the conditions outlined in this book.

PT gets great results when a patient has muscle related issues, however, it usually falls short when it comes to disc issues, because it doesn't do anything to improve imbibition or help to improve the health of the disc.

Injections:

Typically, if medication and PT have failed, the next step is to have the patient get an MRI to find out what is going on in the spine.

Depending on what conditions are discovered in the MRI, the next step in care is usually some type of spinal injection.

There are a few to choose from, so let's review the most common.

- **Epidural Steroid Injections (ESI)** - There are a few different varieties of ESIs, each one focusing on a different area of the spinal joint. However, the end goal is the same for all of them; inject anesthetics and/or steroids in the area to reduce inflammation (swelling) in the joint and relieve pressure on the nerve roots to reduce pain. Because they do nothing to restore the health of the disc itself, any relief is short-lived. In my opinion these procedures come with a lot of risk, usually with very minimal rewards. I would advise you to do your own due diligence before you ever consider this procedure. Dr. Oz did a great job covering the risks of these procedures, you can look it up online.
- **Facet Joint Injections or Facet Blocks** - Facet injections also involve injecting anesthetics and/or steroids into and around the facet joints. Again, the goal is to reduce inflammation in the area and reduce pressure on the nerve roots. Unfortunately, these injections do nothing to address the root cause of the facet problems, which is poor disc health and hydration, so any relief will be short-lived.
- **Radiofrequency Ablation (RFA)** - RFA is a more long lasting solution compared to the other injections mentioned earlier. Instead of injecting anesthetics or steroids into the area to reduce inflammation, RFA targets the actual nerves themselves. Using a needle that is inserted into the target nerve, they are able to use radio waves to generate heat and burn the nerves so they can no longer communicate pain signals. While patients may experience relief, it is no different than removing the lightbulb from the dashboard of your car. The problem is still there, you just don't feel it

anymore, so the risk of further damage is very high. Due to our bodys' innate and amazing ability to heal, it is possible for the damaged nerves to heal and repair themselves, thus causing the pain to return and requiring the procedure to be performed again.

Again, we see the same issue as before, all of these injections are designed to treat the symptom of pain. All of them completely disregard the root cause of the pain, so if they help at all, it is only temporary.

Surgery:

In most cases that I see, once all of these other methods have been tried and failed, the next recommendation is usually to send the patient for a consultation with a surgeon.

I am not a surgeon. I have a good understanding of the surgical procedures and what they involve, but do not claim to know all the intricacies and details of how they are performed, so do your own due diligence before agreeing or disagreeing to have any surgical procedure.

One thing I have noticed over the years is that most people seem to regard surgery as the ultimate solution to any health problem. They often tell me things like “I really don’t want to have surgery, but I may have to so I can get relief.” Our society seems to think that surgery will always be the guaranteed solution to whatever health problem they are having. It’s an attitude of “If all else fails, have surgery...because it never fails!”

Please don’t misunderstand me, I know that modern medicine has advanced to the point that we have surgeries for all kinds of things, and that many, many lives are saved or improved every day because of it. However, there are limitations and shortcomings for every surgery in existence. Some are definitely more successful than others at achieving the desired outcome.

Specifically regarding spinal surgeries, the statistics for success are not great. Nobody seems to agree on numbers and each study comes up with wildly different numbers, so I won't even go into the specific statistics.

However, if you want to get a general idea of just how prevalent the problem is, just take a moment to search online for this abbreviation and see what comes up: "FBSS". If you're like most people, these initials will mean nothing to you...but I guarantee you they mean something to every spinal surgeon in America. So, take a minute to look it up right now, you'll probably be shocked at what you find.

It's okay, I'll wait. Go search right now and then come back to the book, I'll be here when you get back...

Surprising isn't it? Even though the "data" doesn't always agree on how bad spinal surgery is, there is definitely a consensus that there is a major problem and that is why there is so much research and so many medical journal articles all focused on trying to figure out what to do about this crisis.

It is also noteworthy to point out that there is no "FSSS" for shoulder surgeries, or "FKSS" for knee surgeries, or "FHSS" for hip replacements. Spinal surgery is unique in this regard.

Before I jump into the different surgeries, I want to make one thing very clear: **There are times when spinal surgery is absolutely necessary.** When this is the case, and there is a medical necessity for surgery, it needs to happen as soon as possible, do not wait, "do not pass go, do not collect \$200" (Monopoly reference)

However, I have never seen a patient in my clinic in that situation. All of my patients that have been recommended for surgery have all been advised to have elective procedures, meaning it is by choice and not medical necessity.

My counsel to patients is to always exhaust all other possible treatments before considering elective spinal surgery.

Aside from the poor outcomes associated with spinal surgery, there are also the usual risks associated with any surgery, such as infection, bleeding, increased pain, anesthesia complications, blood clots, scarring, and tissue damage.

I don't want to spend a lot of time going into the details of each of these surgeries and why they fail to repair the root cause, as it will be fairly easy to see that none of them help improve disc health. So if you really want to know the nitty gritty of each of these procedures, there are many resources online where you can learn in great depth about each of them.

- **Microdiscectomy** - In this surgery the surgeon cuts off and removes the part of the disc that is protruded out. This sounds pretty good at first, except that in order to get to the disc, they have to remove a section of the Ligamentum Flavum (LF), which is a wide ligament that extends the length of your spine and limits forward flexion (bending forward). Once this is removed, your forward bending range of motion will be increased. Forward flexion increases pressure on the disc and is associated with bulges and protrusions. So that may explain why there is a very high recurrence of herniation following a microdiscectomy.
- **Laminectomy** - This surgery is usually used in cases where facet osteophytes are impinging the nerve root. In this surgery the surgeon cuts out the Lamina, which is the “back wall” of the vertebra as well as the Ligamentum Flavum. This is done to open up the canal and provide more room for the nerve root. This surgery may be needed if the bony overgrowth is too severe. As with a microdiscectomy, the removal of the Ligamentum Flavum may lead to further damage at that level of the spine.
- **Spinal Fusion** - This surgery is the “big daddy” of back surgeries. It is the complete removal of the disc, replaced by a metal cage where the disc used to be. Then a separate surgery takes bone material out of your pelvis to pack into the metal cage. Over time the bone graft will fuse the two vertebrae together. In order to limit motion of the spine while the graft fuses, they will use rods and screws to bolt the two vertebrae together. Obviously this does nothing to repair the disc, as it is completely removed. The downsides of this surgery are many. First, recovery time is lengthy as it is pretty major. Second, the hardware used to bolt the vertebrae together is not

removed, and the risk of hardware breaking or coming loose is always present. Finally, by removing the disc, all the motions of the joint are eliminated, which increases the functional demand on the discs above and below the fused segment. It then is only a matter of time before the neighboring discs begin to have major problems, then requiring more surgery on those segments too.

I have only listed 3 surgeries, but there are many more, each designed to treat the different conditions we've been discussing. The important thing to remember is that none of them, including the ones I haven't mentioned, actually try to rehydrate the disc.

“Alternative” Treatments:

So far I have only covered the common treatments you will find within the “medical community”, but what about “alternative” treatments, won't they help? Many in our society are starting to see that the healthcare system we have is broken, and that maybe drugs and surgery should be the absolute last resort, not the first. I'm sure there are many different treatments that could fall into this category of alternative treatments, but I will focus on the two that I hear about the most.

Chiropractic:

For many people, the first doctor that comes to mind for neck or back pain is a chiropractor. They are known for their ability to “pop” and “crack” a patient's way to feeling better.

Chiropractors are not all the same. They vary in what they do and how they do it, so what I say next is a very broad generalization. Many chiropractors are focused on the alignment of your spine, and making sure that the vertebrae are in proper alignment relative to each other.

This proper alignment can often reduce a patient's pain and improve range of motion. However, if the pain is being caused by

a disc problem, there is no amount of “twisting and popping” that will help the disc to heal. If you’ve tried chiropractic care and it has been unsuccessful, it is because just like the other treatments, it doesn’t treat the disc, so it can’t really help you get better. I recommend chiropractic care in addition to the other treatments we provide in our clinic, to make sure you have a solid structural foundation and for all the other health benefits that come with it.

Massage Therapy:

Most of the conditions we’ve discussed will directly or indirectly affect the surrounding musculature. When our brains detect instability in our spine, the natural response is “muscle guarding”. Muscle guarding is when the brain sends a signal to the neck or back muscles to tighten and restrict movement in the spine to increase stability and decrease movement to protect against damage to the spinal cord.

This safety mechanism is great, but not always fun. It results in very tight and painful muscles. Massage can help to alleviate the tightness and tension in these muscles, but it is usually only temporary relief because as long as the condition causing the tightness is still there, the muscle guarding will continue and so will the pain.

In addition to the treatments we provide in our clinic, I highly recommend massage therapy to help with the healing process. However, because it can’t help the disc specifically, I would say that it isn’t of much benefit on its own.

WOW! That was a lot of information, and there are still so many more things that could’ve been discussed in this chapter, but I think you get the point. As you consider any possible treatment, ask yourself this question: “What will this treatment do to help my disc?”. If it doesn’t focus on getting to the root cause, then why bother? Like my Mom always said, “get the root or we’ll have to do this all over again.”

Chapter 6

Getting the Root

Nobody likes to waste time pulling the tops off of weeds, only to do it again the next weekend. So, let's answer the question "how do we get to the root of this problem?"

We know that the root cause is an insufficient amount of imbibition that causes the disc to dry out. So to fix it, all we need to do is to increase the amount of imbibition so that the disc can get back to a more healthy state.

The treatment we use in our clinic to accomplish this is called: Non-Surgical Spinal Decompression (NSSD).

Now, you may have heard of this before or it may be completely new to you. Either way, I want you to completely clear the slate of what you may have heard about it or what you may think it is.

I have seen a lot of things online about NSSD, both positive and negative, so I know there is a lot of misinformation out there and I want to share with you my own thoughts and opinions about what NSSD is, what it can do and also what it can't do for you.

Let's start with what it is. The concept of NSSD was first conceived by Allan Dyer, PhD, MD in 1985, who later invented the first NSSD machine in 1991. His idea was to use computer

controlled traction to gently stretch the spine and create a vacuum force inside the disc that would draw fluid back into the disc, while at the same time, using that vacuum force to pull in or retract a bulging or protruded disc.

Since that time, there have been a few different iterations and many improvements made to Dr. Dyer's original machine, but the concept remains the same: pull in fluid and retract bulges/protrusions.

Below is an image of the NSSD machine that we use in our clinic, it is called the AccuSpina, and it is considered by many to be the most advanced NSSD device in the world. It uses a sinusoidal oscillation wave pattern of tension as it pulls the spine, to accelerate the imbibition process throughout each treatment session.



What on earth does that mean? I'm glad you asked. The machine goes through a series of stretching and releasing the spine. This occurs over and over, essentially pumping the discs to reproduce imbibition. Each time the machine is at maximum tension it adds an additional series of small pumping actions. The "oscillation" is when it does those small "micro" pulls. This oscillation is a unique feature to the AccuSpina and is super beneficial because of the additional imbibition that is achieved.

So now you know, NSSD is essentially just artificially created imbibition. As it gently stretches the spine, it recreates and accelerates the imbibition process that naturally occurs in your spine, with one major difference. When it occurs naturally it happens within normal anatomical ranges, but with NSSD the disc is stretched slightly beyond the day to day ranges in order to create the vacuum effect needed to pull in extra fluid. I like to think of it as "imbibition on steroids".

In a nutshell, that is what NSSD is and what it does. That is why it can help patients that have disc problems; the machine is able to do what their spines are having trouble doing, so it can resolve existing conditions and help prevent future problems. As the disc becomes hydrated again and the bulges retract and stenosis is reduced, patients start to feel much better.

Knowing what we know about the root cause of so many neck and back problems, NSSD sounds pretty amazing doesn't it? It is the one treatment that can actually help a suffering disc get better. On paper it sounds like the perfect cure, but reality is always going to be a bit different.

I'll be the first to come right out and say this... NSSD is NOT a cure for most disc problems. I have seen a lot of claims that make NSSD sound like it is the best thing since sliced bread, that it is the "cure" you've been searching for. I disagree.

Here's why: Remember in chapter 4 how I said that the majority of the cases I see are not traumatic injury cases, but rather gradual onset issues that have no explanation for what caused it? This means that the reason the disc is having problems and causing all these other problems is because the disc itself isn't able to perform imbibition sufficiently.

I like to compare it to kidney function. If your kidneys stop working properly, you will need to have dialysis on a regular basis or you will die. Dialysis is the artificial filtering of the blood that needs to happen when the kidneys can no longer do the job. Dialysis isn't a cure for kidney disease, but rather a way to artificially perform the duties of the kidneys.

NSSD is the same. If the disc is unable to perform adequate imbibition on its own, NSSD will not change that, it will merely do the job of imbibition to hydrate the disc. For this reason I say it is not a cure, but more of a treatment to maintain optimal disc health. Rarely do I see patients get "cured" after completing their initial care plan. In almost every case they will need to continue having maintenance care in order to continue the benefits of NSSD. This is simply because whatever deficiency their disc has that caused the disc to stop working in the first place will still be there, fighting any efforts to hydrate the disc.

That being said, we've already discussed the other common treatment options and are well aware of their shortcomings. Given the choices, NSSD is by far the best treatment option for disc issues; it is able to reproduce imbibition, hydrate the disc, undo damage, and help to prevent further degeneration and damage. It's only downfall is that it can't keep the disc from having issues in the future.

So, if you approach it like you would dialysis, then you can see that a person can get better and continue to feel better for years and years, simply by helping their discs stay healthy and hydrated.

I want to conclude by thanking you for taking the time to read this book. It is my sincere hope that you have learned something from it, and that it has been worth your time to read it.

I also want to say that if you have been suffering with any of the issues I've talked about in this book, I urge you to give NSSD a try. I have seen some miraculous changes happen from NSSD. It brings me great joy to see my patients progress and get better. I hope to be able to help you too.

Dr. Taylor