

Chiropractic BioPhysics and Gonstead Tech for Spinal Health

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✓ Fact Checked

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STORY AT-A-GLANCE

- › Together, Chiropractic BioPhysics® (CBP) and Gonstead technique create a strong structural correction program for those with cervical spine degeneration and other spinal misalignment problems
- › Structure dictates function. If your spine is misaligned, your nervous system will be adversely impacted. Getting regular chiropractic adjustments is important for the maintenance of your spine and overall health and physical function
- › When your neck structure is sound and you have a 45-degree curvature, your spinal cord is at its best position to allow communication signals to be sent throughout your body
- › When your spine is out of alignment, you lose the ability to hydrate the discs between your vertebrae, which results in diminishing disc space, bulging discs and, possibly, herniation
- › A common assumption is that unless you're experiencing pain, all is well. In reality, many if not most diseases are asymptomatic until the disease process is well underway

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Nearly two years ago, a good friend of mine, Dr. Peter Martone, a longtime chiropractor, pointed out I had some problems with my cervical spine. While I initially disagreed, X-rays revealed degeneration in my fifth and sixth cervical vertebrae, even though I had no symptoms at all.

In this interview, Dr. Michael Hill — a graduate of Palmer College in Davenport, Iowa — discusses Chiropractic BioPhysics® (CBP) and Gonstead, a specific type of **chiropractic treatment** that addresses this kind of problem. I've always been opposed to X-rays and don't recommend them. In this case, however, it's necessary, as the treatment is precisely calibrated based on the X-ray data.

"With chiropractic, one of the big components I like to really help patients understand is ... where all health and healing comes from," Hill says. "We can't deny that the nervous system coordinates all function and healing in the body. If you don't know how to take care of it, who's going to do that for you and help you understand the importance behind it? Education is one of our biggest components in our office.

Chiropractic technique stands on three legs: the philosophy, science and art. If we take one away, it's easy to tip over. We've got to stay solid on those three components ... Gonstead and CBP have a lot in similarities, but a lot in differences. When it comes to understanding 'structure dictates function,' your spine is basically the framework of everything else that works off of that.

Then it's important to understand that we need to identify any structural changes that are compromising the way we should function. The intimate relationship between spine and nervous system is just that. It's intimate — if we don't take care of the spine, the [nervous system] is going to fall short of 100% function."

Skeletal Structure, Function Influence Your Nervous System

A common assumption is that unless you're experiencing pain, all is well. In reality, many if not most diseases are asymptomatic until the disease process is well underway. As noted by Hill, there's research showing you have to lose 40% or greater of your health potential before any sign or symptom is expressed. "So, it's unfortunate that we are taught to treat and manage disease as opposed to preventing it."

One of the primary tools for maintaining health is to choose the right foods for metabolic optimization, and diet also affects structural function. A Gallup poll by Palmer College revealed only 8% to 12% of the population uses chiropractic.

However, taking care of your spine is like brushing your teeth and getting regular dental checkups. If you don't take care of your spine, problems will eventually present themselves from lack of care, or ignorance about what can and needs to be done.

Structure dictates function; your spine needs to be straight from front to back, but from the side views it should have three curves: lorsosis (cervical), kyphosis (thoracic) and lordosis (lumbar). "It's really important to understand certain standards of deviation, like having a 45-degree curve is what's considered normal," Hill says.

For example, curvature of the neck is called lordosis, but when you have a decrease in that curve, you have a hypolordotic curvature. If there's an increase in that curvature, you have hyperlordotic curvature.

In other words, there's a "perfect normal" in the center, and it's important to identify extremes in either direction. When your neck structure is sound and you have a 45-degree curvature, your spinal cord is at its best position to allow communication signals to be sent throughout your body.

Chiropractors are trained to identify malpositions that can affect your nervous system function. Various tools can then be used to further identify, analyze and monitor imbalances in the body. Examples include surface electromyography, thermography and the Nervo-Scope, used in the Gonstead technique.

"Gonstead uses five parameters: X-rays, instrumentation, motion and static palpation and visualization," Hill explains. "They're really important. You can probably see now that if you were in line at a grocery store and one person had a high right shoulder, you obviously know there's something wrong structurally. If the spine is the framework, then we obviously need to address the framework."

When we put those techniques in place and the tools that we have available, such as digital X-rays, then we can analyze those X-rays using CBP line analysis and the Gonstead. I like to merge the two.

I really feel like we can cover everything utilizing those two techniques, as far as not just getting a patient to feel better, but get them to function better ... If [you're] goal-oriented, you know that once you reach [the goal], you don't just stop the habits that allowed you to get there. I've always been on chiropractic care ... It is part of life."

Regular Chiropractic Care Is Important for Optimal Health

Part of the reason you'd want to continue receiving chiropractic care long term is because the compression that occurs on the nerves exiting the spinal cord from misaligned vertebrae, especially in your neck, can cause significant problems and affect your autonomic nervous system.

Your vertebrae help protect your nervous system, and when your vertebrae are properly aligned, the discs between each vertebra have the ability to properly hydrate. This is called imbibition, or the ability to hydrate that disc.

When your spine is out of alignment, you lose the ability to hydrate the disc, which typically causes the space between the two vertebrae to diminish. As this space diminishes, the disc has to migrate somewhere as there's no longer sufficient room between the vertebra. So, what typically happens is the disc will start to bulge over time.

This is not just an automatic consequence of age, but rather something caused by misalignment in the spine. What's more, as the bulge gets worse, it actually starts changing the shape of the bone, causing bone spurs to develop. As the angular fibers defining the disc are disrupted, the integrity of the disc is also weakened, which can lead to a herniation.

"Understanding that we can address the cause by correcting the misalignment will allow us to be able to hydrate that disc," Hill says. "We can actually help

restore it to a certain point, depending on the condition of the bone. We're obviously not going to be able to eliminate what's already been destroyed."

Home Exercise Therapy

This is precisely what happened to my lower cervical spine and vertebral disc spaces. They were degenerating, but after just three months of therapy, the degeneration is starting to reverse. In the past, I had been reluctant to get regular chiropractic treatments because, mechanically, it just didn't seem to make sense that a little adjustment here and there is going to make a massive difference. But those minor adjustments really need to be done on a regular basis.

What I really like about Hill's program is that it's integrated with home exercises to rehabilitate the spine. It never made sense to me to rely on a chiropractor to adjust you periodically to solve the problem. I believe you really need to consistently address it at home with a regular exercise program, and that's what Hill had me do.

Based on an evaluation of my lateral curvature, he provided me with a weighted device I wear on my head for about a half-hour each day. Another is a traction unit that you hang from a door, which I also use daily. In this case, your own body weight places traction on your cervical spine. It's made a tremendous difference. In addition to doing exercises at home, you may also need to address ergonomics at work and at home.

Why Digital X-Rays?

Hill recommends taking three digital X-rays of the neck, two of the midback and two of the lower back, along with an anterior-posterior (front-back) and a lateral (side) view. "With the align analysis we use, we can determine exactly the curvature of the spine from the side view," Hill says. "If there is any scoliosis of the spine, we use an analysis called Cobb angle to determine and help to manage and improve the degree of scoliosis on those who have scoliosis."

In the video interview, you'll see the X-rays taken during my initial consultation, and ones taken during a follow-up visit three months later. Here's how Hill described my initial evaluation:

"One of the key things I want to point out is the palate line, which is the roof of the mouth. We want to keep that as level as possible ... Typically, what we'll do is we'll drop a line down from the back of C2 ... And then, we ... compute our angulization, and we get a 27-degree curve here. Ideally it should be 45 degrees. Most of your curve makeup is right between C3 and C4. That also explains why C5 and C6 [have degenerated] ...

A lot of people are told that's normal because of your age ... but it's not. It's common but it's not normal ... [I]f there's an age relationship, then why isn't every other disc space degenerating at the same rate as C5 and C6? ...

Also, if you [go] down C3, you'll see the malposition, the extension position ... Like you see on C4 or C5, if you follow the back edge of the vertebrae, they should all line up. That would be considered a disruption of the George's Line."

Looking at my recent X-rays, you can see a big difference. The extension view of C3, the George's Line, is much better in degree and my C2 angle is zero, which is fine, as normal is anywhere between zero and 10 degrees. I've also achieved a 6-degree improvement in the angulation of my spine.

It's now at 34 degrees and the measured disc space has increased considerably. Ideally, the angle should be 45 degrees. While the degenerative changes are still there, it's a definite improvement in just three months.

"The degrees of change you've made in such a short period of time ... [for] quality of life is huge and important. I think that's the side effect of chiropractic. Pain relief is just a secondary component to correcting a structural change in someone," Hill says.

"For instance, the nerves in the neck travel down the arm, forearm and hands, [and] the same nerves go to organs, communicating between the parasympathetics and the sympathetics to help with heart rate variability ...

For those who have spinal degeneration, like in your neck, one of the chief complaints, and one of the measurements we take into consideration, is the loss of range of motion. You're going to have a change in range of motion with this type of spinal degeneration, depending on the severity. We also create scar tissue in there, called crepitus, like a frozen shoulder. Sometimes we have to get in there, and through repetition, break it up."

How to Locate a Good Chiropractor

As mentioned, it's a relatively small percentage of the population that is under chiropractic care, and unfortunately, there are unscrupulous chiropractors that don't practice the type of holistic care Hill and others offer. When it comes to finding a good chiropractor, here are some helpful pointers to keep in mind:

- Find someone local. You may need to see your chiropractor two to three times a week to start, so make sure his or her office is conveniently located.
- Find out if the chiropractor uses digital X-rays and other important tools. "When it comes to your health, your X-rays tell us a big story," Hill says. "For instance ... without X-rays, why would we want to adjust an area considered a Grade 1 through 4 spondylolisthesis, which is the slipping of vertebrae on top of the other, which is a disruption of the George's Line? X-rays and all these details are super important. If patients aren't getting that, I would be concerned."
- Find out what type of techniques the chiropractor uses. "If the staff isn't aware — isn't in tune with what you do and how you help patients — I would be concerned," Hill says. The techniques discussed here are, again, known as Chiropractic BioPhysics® or CBP, and Gonstead, which together make for a very strong

structural correction program. Another effective alternative is the Network technique, developed by Dr. Donny Epstein.

Hill's office also has a decompression machine. He ended up investing in this expensive piece of equipment after a particularly difficult-to-treat patient died. The woman had a severe lumbar disc herniation that migrated. Since Hill was unable to help her, she went to a [medical doctor who ended up prescribing opioids](#).

She developed an addiction and died from what appeared to be a heart attack. Learning of her tragic fate, Hill decided to implement treatment alternatives to prevent that from happening in the future. "That 'what if?' is what took me to the tipping point to know I needed to make an investment in a tool that could have, possibly, helped her," he says.

- Does your chiropractor look healthy? Is she or he taking good care of their own health?

The Best Position for Sleep

Last but not least, your sleeping position can make a big difference in the health of your spine. Dr. Peter Martone, who referred me to Hill, is also a chiropractor, as well as an exercise physiologist. He initially had me switch to a neutral (back) sleeping position to help correct my cervical curvature, which I've been doing ever since. In the video above, Martone discusses the benefits of a neutral sleeping position.

If you're a side or stomach sleeper and find yourself frequently tossing and turning at night and/or wake up with aches and pains, your sleeping position may be a primary culprit. That said, remember that absence of pain is not a guarantee that there's no problem.

To get your neck and spine in a neutral position while sleeping on your back, you need to prop your pillow under your neck, not your head. This is what allows you to maintain a proper spinal curve. For a demonstration on how to use your pillow to support your neck rather than simply elevating your head, see the video above.

More Information

To learn more, see [Hill's website](#). There, you can find a number of before and after examples of patients who have been helped by the CBP and Gonstead protocols.