

Technology Headache

Today's Technology Epidemic

Your Breakthrough Guide to Finding
Relief from Chronic Pain

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FOREWORD

“There are a lot of pieces to this puzzle.” For more than two decades, that is the advice I have given thousands of patients who suffer from headaches. I was their chiropractor. Now, those words play over and over again in my mind. “Doctor, heal thyself.” In truth, doctors are notoriously poor patients who never really take sanguine advice or apply the principles of health and healing they share with others on a daily basis.

Headaches are one of the top two reasons patients seek medical attention, afflicting upward of 80% of the general population either in episodic fashion or less frequently, chronically or daily¹. Statistically, the odds of you developing headaches that WILL disrupt your daily routine are increasing. That’s the bad news. The good news is, there is a path to keep you from being a statistic. This book is my journey, as a clinician and as a patient. I do not pretend to have all the answers.

In these pages, I explore the many avenues I pursued, both for my patients and myself. I have written this book for the patient, in layman’s terms. My journey was a long one, and I continue to learn as I go. My hope is that you will find tools to solve your headaches, and become healthier and stronger moving forward.

BIOMECHANICS OVERVIEW

Headaches are complicated; that much we know. For decades, the general thought (particularly in the medical community) was that headaches cause pain, and as a result, patients change their posture in an attempt to feel better or to limit movement. The new consensus is that this change in posture (pulling the head forward and slumping the shoulders) *actually irritated* nerves and muscles, extending the pain cycle⁷. Biomechanical doctors (orthopedic, chiropractic, etc.) now see that altered posture is a main cause of headaches; that poor posture causes the headache rather than the other way around⁸.

In this book, you will learn things that you have not read before, and here is one of those things: when the head slides forward from the spine, the spinal cord - more specifically the brainstem where the brain and spine meet - is pulled and irritated. That pulling has been shown to alter circulation, pain control, brain and eye function, nerve action, in addition to multiple other processes⁹.

With the onslaught of more invasive technologies, humans are spending hundreds of hours each month locked in debilitating postures that ratchet tender tissues, and place the most critical organ, the brain, in a vise-like position¹⁰. The head weighs as much as a bowling ball. If you want to see how much pressure your neck is under, try holding a bowling ball even one inch in front of your body for five minutes. It's no wonder headache cases are growing faster than we can keep up, and we are seeing younger and younger cases of cervical arthritis, ADHD, headaches, and more¹¹.

Once muscles and ligaments are trained to this forward position, it becomes a new normal and will require a more diligent regimen to pull the head back into its previous position¹². In mechanics, there is a normal

posture¹³. The ear hole should be over the middle of the shoulder. Here is an example of the ear forward of the shoulder:



The midline of the shoulder should be directly over the middle of the hip and the hip should be located directly over the ankle bone. Looking front to back, the midline of the chin should be directly between the origin of each collar bone. Ears should be even, neither one higher than the other.



Here, again ear and shoulder off balance.

Shoulders should be the same height and the top of each hip should be level. When alignment is moved away from these normal parameters, added pressure to the bones, discs, ligaments, nerves, and muscles accelerates the wearing of these critical tissues and ages the body prematurely¹⁴. This can lead to a higher susceptibility to arthritis, ligament

laxity, tendon weakness, disc degeneration, muscle injury, and neurological disorders to name a few.

When the head is positioned forward of its normal alignment, elements of the brain and related nerves (brainstem) are further irritated and can alter the amount of oxygen traveling to the brain¹⁵. This type of irritation has actually been shown to change the constitution of the brain itself. The result is a brain that is now functioning less (and aging quicker) while setting in motion main reflex arcs that continue and exacerbate pain cycles¹⁶.

A reflex arc is a natural biochemical process within the body that allows the brain and body to coordinate the manufacturing or production of certain chemicals and processes. These arcs keep the body in balance and able to carry out processes like pain modulation, hormone production, and energy levels. If a nerve is irritated, signals to the brain may not be received and an arc may be disrupted or stopped. If an artery or vein accessing the brain is pinched via spasmed muscles, oxygen to the brain is altered, which can slow or stop arc sequencing.

The brain stem contains pain receptors (NMR) that modulate pain. Posture change alters the brain's ability to naturally control pain.

Additionally, cranial nerves are located in the brain stem, and when altered have a negative effect on balance, focus, alertness and more.

The bottom line is that it's critical to protect proper positioning within the brainstem to allow the tissues (arteries, muscles, and nerves) to operate normally so reflex arcs are able to carry out thousands of vital balancing functions throughout the body.

Positioning the head forward puts some muscles of the neck, shoulder, and back into a chronic contraction mode while other muscles are so unused that they become weak and atrophy. Chronic spasms sap energy from the body¹⁷. This energy is very hard to manufacture as we age, and production begins to decrease as early as age 30. The spasm itself deposits particles, usually calcium, into the muscle, making it sore and less flexible¹⁸.

Over time, poor posture sets in motion chronic pain patterns that weaken, age, and rob vital energy from our precious bodies. In my own journey, poor posture created chronic fasciculations, which are muscles

moving under the skin like a little animal living in your neck or shoulder, of the splenius capitus, splenius cervicus and trapezius.



Not only do chronic contractions drain the body of energy, but the constant pulling on the back of the head also irritates nerves and tugs on the brainstem to the point where the patient gets dizzy in addition to developing headaches that become more chronic each month. We will look at individual muscles in the chapter on posture, and discuss how to fix this poor posture. I cannot stress enough the effect chronic poor posture has on brain activity and the aging of the brain.

Pressure from poor posture is catastrophic in the long term. The pressure creates nerve firing that fatigues the brain and contributes to brain "fog" as well as loss of cognitive ability. The pressure soon yields to more and more pain, which weakens the brain and literally ages it. Many patients, instead of working to correct their posture, take over-the-counter medications. These medications quickly inhibit the body's natural pain control modulation system, causing the kidneys and liver to work overtime and take on toxic byproducts of NSAIDs (Non-Steroidal Anti-Inflammatories)¹⁹.

Forward head posture has also been shown to compress the rib cage, further compromising the patient's ability to take a full breath. The hunching shoulders, compressed rib cage, and tilted or twisted hips restrict oxygen, blood flow, and normal muscle engagement.

The head weight on the spine pulls the nerves and blood vessels carrying valuable oxygen to decrease the brain's intake, and now another cause of headache is in the offing. The answer to your headache may very

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well be in the pages ahead. I encourage you to start improving your posture NOW! It's really not that hard, and you will grow stronger EVERY SINGLE DAY you incorporate these strategies.

KEY POINT 1

The bowling ball effect - weight of head sliding forward pressurizes the brain.

KEY POINT 2

Prolonged alteration of head/shoulder posture degenerates bones, discs, ligaments, muscles, and nerves.

KEY POINT 3

Chronic muscle overuse atrophies the opposite muscle group, requiring the body to compensate with extra energy that would normally have gone to nutrition.

KEY POINT 4

Chronic poor posture alters oxygen and pain modulators in the brain, causing it to age faster.

BRAIN GAMES

I have had the good fortune to investigate many therapies over the years. One of the most fascinating occurred when I was a team chiropractor for a professional hockey team. While there, I met an optometrist who had developed a visual acuity program to help athletes improve hand-eye coordination, response times, and vision processing and interpretation. The premise related to treating the eye as a muscle within the scope of the neuroplasticity of the brain²⁰. Also, head positioning, from poor posture, for example, aggravates different lobes of the brain and creates changes in cranial nerves, balance, alertness, and focus to name a few.

As we practiced some of these techniques with athletes, PTSD patients, and the general population, we saw improvements across the board. We realized that there are many paths to improvement, as long as the patient is willing to practice them!

We know the brain can improve as well as the body. As we give the brain the opportunity to alleviate pressure from poor posture, headaches can be treated effectively. Within the brain itself, gains can happen by creating new pathways of learning which, when practiced, can increase oxygen flow to the brain, bring it vital nutrients, and discourage the brain from “stinking thinking,” replays that can attract the brain to fatigue, anxiety, and depression²¹.

There are a number of brain games available through Google and the like. We found particularly solid results with the ones I will mention next.

The major concept most brain games share is changing the daily script. For example, if you brush your teeth with your right hand, practice brushing your teeth with your left hand. This creates a neuroplastic response within the brain that introduces new pathways and keeps the brain young and dynamic. These types of physical-alteration exercises

appear to be key in changing brain function, circulation, and eventually pain patterns and frequency²². Many of the concepts of neurofeedback are based on this phenomenon.

We encourage patients to combine posture improvement techniques while playing a brain game like brushing their teeth with the opposite hand. Something as simple as retracting your neck muscles (pulling the neck toward the spine) when brushing your teeth to engage the discs, ligaments, and muscles of the neck and upper spine. Doing this for thirty-second can affect better posture and positioning memory.

Patterns as basic as changing how you dress can create such changes. Putting your right sock on first (vs. putting your left sock on first) can influence this, albeit on a smaller scale. The key is changing the pattern.

Patterns in the gym have gained significant traction. The introduction of cross training operates on the concept of muscle memory/muscle confusion. If you consistently change up the workout, muscles (and your brain) must change and grow as a result. Making changes in the gym is a big deal, particularly if you have posture issues and/or headaches. Many headache patients find relief working out, and ALL posture issues improve with exercise (as long as you keep your head up!).

Another interesting changeup is eating with your fork in the opposite hand. Practice holding your fork the same way you hold it in your dominant hand. Don't cheat and use the shovel method with your weak hand; it's not as helpful and doesn't look good (just ask my wife when I started practicing it). Another good one, if you like Asian food, is to try to use chopsticks with your non-dominant hand.

You can scrub your body in the shower with your opposite hand as well. The list is only limited by your imagination!

On the visual side, the role of balance and single-sided vision is fairly easy to explain for patients who are looking to incorporate it into their healing process. Balance influences the brain as you practice walking a line forward and backward with your eyes closed. We taught patients to practice pantomiming sitting in a chair while balancing on one foot, and then switching feet. This is also a great leg workout.

For another challenge, use chalk to draw a figure 8 on the ground that's large enough to walk around. Then, practice walking it forward and

backward. Once you've done that a few times, close your eyes and see if you can repeat the process.

Patients can also use an eyepatch or cover one eye at a time to read, practice shooting free throws or draw shapes on a piece of paper and then trace them. There is an endless list of cool techniques related to visual acuity training, and lots of great information on Google if you are interested.

The goal is to get you engaged enough to change the game for your brain. Many patients' headaches have reduced greatly, and the brain gets stronger over time with practice. We are not victims of our circumstances: we are victors who find a way, continue to strengthen our minds and bodies, and overcome!

KEY POINT 1

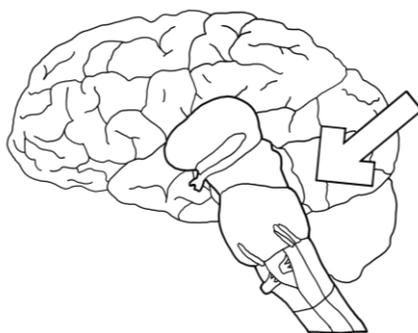
Change daily routines to stimulate brain plasticity.

KEY POINT 2

Cerebellar eye exercises improve balance, focus, alertness and more.

BRAINSTEM

The crux of physical symptoms boils down to the brainstem. Let me explain as this topic has, until now, received little attention within the world of headache treatment. The brainstem is the part of the brain closest to the top of the neck or the bottom of the skull. Poor posture pulls the head forward to the point where it tugs on the brain stem. The resulting pressure disrupts oxygen flow to the brain and causes abnormal nerve patterns. This, in turn, creates altered brain function and muscle spasms (fasciculations) that squeeze arteries and veins, decreasing oxygen and further altering already poor posture²³.



The brainstem also houses cranial nerves that are deeply affected by consistent flexed posture. This posture irritates visual fields, which weakens the posture even more. Today's technology slows the brain and affects balance, focus, and the ability to inhibit pain.

While treating headaches for over two decades, I found that many patients had similar stories, but each case offered a new twist. One patient would have success taking caffeine while another could not take caffeine, but found improvement with a coffee enema. One patient found headache relief by hanging her head off her bed for five minutes, and another wore a

cervical halo when she made dinner that proved a big help with her headache frequency.

Soon, I was asking patients to journal about what worked and what didn't. This was a huge breakthrough. When you measure a result, you can replicate that result. I took notes as well. Little did I know that soon enough, I would be the patient with chronic, daily headaches that needed my undivided attention.

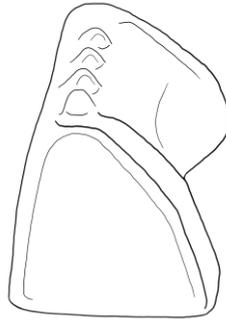
The physical complaint across the board was that all patients struggled with anterior weight bearing (posture in which the ears are forward of the shoulder posture), spasms of the neck and shoulder muscles and pressure or tenderness in the back of the head (brainstem).

I do believe everything happens for a reason. Treating so many headache cases gave me the insight I needed to help myself, and now, to write this book. It was in reviewing my own case that I could review so many of the headache treatment plans I had researched. As a result, I developed a protocol based on the results I had seen over the years. This is the culmination of that work.

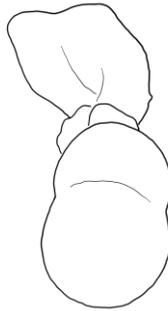
The Werness Protocol (visit www.TechnologyHeadache.com for details) begins with an assessment. We ask a series of questions to identify which treatments offer the most potential relief for each unique case. Treatments are then broken down into three symptom patterns: Physical, Duration, and Trigger.

For example, if your headache pattern indicates a physical symptom-induced headache, a headache that begins in the back of the head, it is usually associated with a cervicogenic headache diagnosis. If this is you, there are three specific treatments you can do right now to improve your headache intensity and duration. These types of headache symptoms most significantly affect the brainstem and its function from a physical standpoint²⁴.

Here is what to do: first, you must take the pressure off the muscles that are making the neck tight. A device called an occipivot, which you can find on Amazon, can help with this. Lay flat on the rubber device with the base of your skull positioned on the pointy edges of the device.

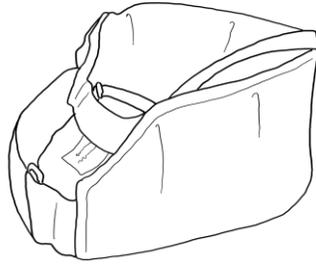


You can also make your own occipital support by placing two lacrosse balls in a sock and laying flat, the back of your head on the balls.



Second, stop looking down. Many headache sufferers have very weak neck muscles, and the antagonistic muscle tends to be tight and quick to spasm. I discuss helpful neck-strengthening exercises in my chapter on exercises.

Equally effective is using a weighted cervical band (Halo) on your head when you are on your phone or laptop. This is helpful in helping to maintain neck strength when you find yourself looking down. These can also be purchased on Amazon or at a chiropractic supply.



I realize this cannot be done all the time, but a conscious effort must be made to do this at least some of the time or you may develop headaches daily if that hasn't happened already. It's critical that we understand how much time we are looking down instead of looking up. Make a conscious effort to spend time looking up.

I also encourage evaluating where you spend your time. If you spend eight hours at work, it's not enough to just improve work station ergonomics. Consider wearing the cervical halo 20 minutes a day and/or taking a break during the day and laying on the occipivot. Or both, if you can!

At home, hang your head off your couch while listening to music or watching TV. Have fun with it! Have the whole family act like bats, hang and have family time. Lord knows kids need to work on their posture as well.

While at the gym, it's extremely important to have correct head posture while working out. Try to extend your head up in any exercise that can accommodate the position.

In bed, practice using a rolled-up hand towel on your bed and extending your neck over the towel to sleep or to meditate before sleep time or when waking. I have found it possible to extend my head upward while laying on my pillow. I feel the curve that I am supposed to have when I position my neck this way and have even fallen asleep in this position.

I will discuss normal anatomy more specifically in the chapter on posture, but just briefly, the normal position of the neck is to have a

reverse “C” curve which properly distributes the weight of the head throughout the cervical spine.

A third activity to consider: we see many patients who suffer from olfactory sensitivity. In other words, headaches can be caused or exacerbated by certain smells or can create an allergic reaction.

The key again is influencing how much oxygen is getting to the brain²⁵. Here is an effective treatment:



You will need an ice pack, oregano oil or peppermint oil, a bag of green tea or jasmine tea, a teapot and a hand towel. Boil your choice of tea in eight ounces of filtered water, then allow it to become warm, but not hot.

Dip a hand towel in the tea water until the towel is completely saturated. Allow the towel to cool to the point where you can place it over your head and eyes. Take two drops of the oil in your hand, rub your hands together, then place them over your nose and inhale deeply. I have had patients place the drops under their nostrils, but the oil may burn the skin. Drops can be purchased at a health food store.

Next, lay on the floor with an ice pack positioned at the base of the skull (on the floor). You may place a thin paper towel over the ice pack. At this point, lay your head on the ice pack. The hand towel is placed over the forehead and eyes.

Now, practice deep breathing with your hands, and the oil, cupped over your nostrils. Breathe in through the nose and out through the mouth deeply enough that your belly rises and falls with each breath. Practice breathing in for three seconds through the mouth, take three seconds to hold the breath in the belly, then three seconds to exhale the breath out

through the mouth. Slow the three count with each breath. Slide into a meditative state while the moist tea soothes your eyes and the oil replenishes your cell-carrying oxygen levels.

This will reduce headache symptoms by relaxing your occiput muscles and increasing oxygen to the brain. This treatment lasts 15 minutes.

There is definitely a lot to the headache saga, and I didn't write this book thinking I could answer all the questions. Many headaches have crossover symptoms, like migraines, that can mimic elements of tension headaches.

Yet, I am convinced that poor posture is the main reason for headaches becoming even more of an epidemic. I believe pressure on the brainstem creates the physical, chemical, and neurological storm that tips the scales from head pressure to a full-blown headache.

I am introducing concepts I know have the ability to change lives of headache sufferers. Each chapter describes the tools and topics we use in my protocol, assessment, and plan that is streamlined to reduce the patients' diagnostic and treatment-option maze.

In my opinion, assisting the brainstem, as outlined in this chapter, is a critical group of treatments. The protocol for many requires multiple treatments and changes on the part of the patient, but they have proven to be well worth the effort.

KEY POINT 1

The occipivot helps reduce pressure on the brainstem.

KEY POINT 2

Change how you sleep, work, and exercise to support the neck curve that keeps the brainstem supported.

KEY POINT 3

The tea bag treatment can be used to relax the brainstem and increase oxygen to the brain.