Case Study in Headache:

The Corrective Aspect of Craniosacral Fascial Therapy

By

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INTRODUCTION

Headaches are common among children.[1] One third of all seven-year-old and one half of all fifteen-year-old children experience headaches.[2] Two and one-half percent of all seven-year-old and fifteen percent of all fifteen-year-old children have "frequent" headaches.[3] Current evaluation involves taking a history and performing physical and neurological examinations; treatment consists of palliative care such as rest and/or analgesics.[1] Another more corrective approach can be through the craniosacral fascial system, an integration of the craniosacral and fascial or connective tissue components.

LITERATURE REVIEW

In 1939 William Sutherland D.O. discovered the gentle "breathing" motion of the brain.[4] Herbert Miller D.O. reviewed the neural pathways of head pain in 1972.[5] Harold Magoun D.O. described trauma as the main cause of headache in eight case studies and reported that manual therapy helped to relieve the pain and reestablish the body's normal physiology.[6, 7] In 1983 John Upledger D.O. discovered that the strain from cranial trauma was held in the dural meninges surrounding the brain and not in the cranial bones.[8]

The fascial component of the craniosacral fascial system is a full body web that intertwines and infuses with every structural cell including muscles, nerves, blood and lymph vessels, organs, and bones.[9] John Barnes P.T. found that the fascia can become strained in trauma and create many symptoms and conditions like headache.[9] These pathological strain patterns can pull anywhere in the body, including the cranial structures, at up to 2,000 pounds per square inch.[10]

Anatomically in this system, the nutritious cerebrospinal fluid starts in the choroid plexus of the ventricles, gently fluctuates through the craniosacral structures, and flows within the cranial and spinal nerve sheaths out into the fascial collagen tubules.[11] Researchers confirmed this whole body system when they found cerebrospinal fluid in these tubules with surprisingly no ordinary ground substance, blood, or lymph present.[12]

The goal of craniosacral fascial therapy is to mitigate the effects of head trauma, which can occur in utero, at birth, and/or during childhood. This trauma can create a zero or minimal brain cycle, the inherent brain motion of one full expansion and contraction in seconds. This cycle is the key indicator to check how well the craniosacral fascial system is working. Generally, the longer the brain "breathes", the better it can function without pain. Because the motion of the cranial and sacral components determines the quality of cerebrospinal fluid flow, this system can have a great effect on the neurophysiology of the entire body.

CASE PRESENTATION

History

On April 26, 2003 a twelve-year-old girl presented with the primary condition of headaches. She also had concurrent earaches, rhinitis, and sore throats. Her mother's pregnancy was normal, and when she began contractions, she had epidural anesthesia.

After eleven hours of labor, her doctor induced her with oxytocin. The fetus became distressed because it was “stuck on her hipbone”. The nurse pressed hard on her abdomen twice to force the fetus to move. The newborn was born cyanotic and not breathing; doctors immediately initiated respiration and then placed her in the NICU for twenty-four hours of recuperative care.

As an infant, she was colicky and had projectile vomiting for about a year. Then the earaches occurred along with sinus pain, sore throats, and headaches. As time went on, she did not “grow out” of these conditions; they worsened in grade school where she missed more than seventy-eight days of class. She was on constant antibiotic treatment until it stopped working because of tachyphylaxis.

Over the years her parents consulted with more than a dozen headache doctors, many affiliated with major pediatric institutions on the East coast. They did every conceivable test, which were all negative, and primarily prescribed sumatriptan succinate and countless other pain medications, none of which gave her permanent relief. Upon finding a small mucous cyst in her maxillary sinus, some doctors thought this might be the cure. Her parents refused this surgical option. Since the medical model had no definitive answer for her, her family turned to alternative care.

Clinical Findings

When I palpated her cranium, I could not feel any perceptible brain motion. She was in a “locked down” state where the cranial dural tissues were extremely tight. Her left temporal bone was severely internally rotated and her right temporal bone was severely externally rotated. Her head was distinctly lopsided upon palpation. Her facial bones were correspondingly misshapen, and her sacrum and dural tube were similarly distorted in position and restricted in motion. Her head and neck muscles were tight, but her oral structures were not a contributing factor.

I explained to her parents that her entire craniosacral fascial system was distorted and restricted, possibly due to her stressed fetal position. I outlined a series of treatment visits, and the family was open to any non-invasive therapy.

Treatment and Results

The goal of the first visit was to help her body release the tight dura around her brain. She was so locked in that it took minutes for the meninges to gently release as the brain opened to a cycle of only a few seconds. She left the office with a brain cycle of about ten seconds, five seconds in expansion and five seconds in contraction. Most children usually open to a greater amplitude on their first visit; this indicated her severe meningeal tightness. Afterwards, she felt sick to her stomach in the detoxification process and was sleepy for a few days.

As her tissues began to free up and her cranium became more symmetrical in therapy, her headaches diminished in number and intensity. She finished her third visit with a respectable fifty-second brain cycle. As the temporal, ethmoid, and vomer bones started to realign to their normal position, mucous causing dairy products also appeared to be a causative factor of her earaches and rhinitis. Following the recommendation of many medical authorities, I suggested to her that she stop consuming dairy products.

[16] After a few weeks, her sinus congestion cleared out, and her earaches and sore throats significantly diminished.

Since the muscles in her upper body were tight, I referred her to a Pfrimmer muscle therapist for deep tissue work. She became sick after the first visit as toxins released from her muscles. I also helped her body release the fascial strain that was pulling into her cranium from her neck and trunk. These myofascial tissues had to fully relax to resolve her headache condition.

Another headache factor was the scar tissue from her appendix operation. Abdominal scars can create a fascial strain pattern freezing the motion of the sacrum, which in turn can restrict the movement of the dural tube and cranium, thus contributing to her central nervous system distress. As therapy progressed, I eventually helped to release her pelvic fascial strain patterns that appeared to be the primary source of her headaches. In the full body web, fascial strain from one part of the body (pelvis) may be pulling through another area (back and neck) to a distant part (cranium) to cause conditions there (headache, earache, and rhinitis). One factor causing many ailments is a different way to look at diseases.

After eighteen thirty minute visits of craniosacral fascial therapy over four months, her brain cycle was holding at ninety seconds, and her major fascial strain patterns were gone. The motion of her brain, dural tube, and sacrum were all in synchronicity. As a result, her headaches, earaches, and sore throats had stopped, and her sinuses were clear.

As with the case of many active teenagers, recurrent trauma necessitated on-going therapy. She headed the soccer ball many times, and fielders kicked her in the head twice when she played goaltender. Her orthodontic appliance and lidocaine injections for routine dental work also restricted her brain motion causing her headaches. When her schoolwork became stressful, she clenched her teeth at night causing early morning dull headaches.

When her family was skiing at their winter home in Vermont, a faulty heating unit caused her carbon monoxide poisoning and headaches. During a minor surgical procedure, the placement of the incubation tube caused fascial strain in her throat and eventual headaches. She hit her head in the shower, and as a passenger another driver struck her school van causing her whiplash and headaches. All in all, she required an additional forty-six visits of therapy over a five-year period to mitigate the effects of these traumas. As long as her craniosacral fascial system was open and functioning well, she remained headache-free.

DISCUSSION

With over thirty years of clinical experience, I have found that craniosacral fascial therapy has proven to be an effective modality to effectively treat children with headache. Since the craniosacral fascial system encompasses many common pediatric diseases, this method can not only help children with earaches, rhinitis, and sore throat like this child but also children with asthma, ADHD, colic, esophageal reflux, and strabismus.[17-19]

In current medical thought trauma is not considered a primary etiological cause of these conditions. Headache involves trauma of the trigeminal (V) nerve, which is the

primary sensory nerve of the cranium. Traversing from the pons forward over the apex of the petrous portion of the temporal bone, it divides into three branches just before it leaves the cranial base: the ophthalmic, maxillary, and mandibular divisions.

Two postulates may be at the root cause of headache. A restricted brain cycle with little or no cerebrospinal fluid flow may adversely affect the neurophysiology of this nerve. Another hypothesis may involve entrapment neuropathy when a small foramen in the cranial base compresses one of these divisions and its dural sheath.

Another example would be nervous tissue from the trigeminal (V) nerve surrounding the middle meningeal artery embedded in the parietal bone. Anatomically, the hard parietal bone, grooved for this artery, and the loose dural meninges create a blood vessel "sandwich". When the meninges become strained and immobile due to trauma, pressure between the two hard objects may cause the blood vessel to swell, sensitive nerve endings to fire, and the head to throb. When the therapist relieves the meningeal pressure, both the cerebrospinal fluid can regain its normal flow, and the dural pressure can release from the free nerve endings of the blood vessels to regain normal neurophysiology.

The abnormal pressure of the fetal cranium on the inside of the mother's pelvis may have predisposed this child to headache, earache, and rhinitis. There is no current procedure to prevent this trauma in utero, but birthing professionals could have checked her craniosacral fascial system as a neonate. If they had identified the problem and performed therapy at birth, her clinical outcome may have been completely different. Checking the craniosacral fascial system after the Apgar score and at well care pediatric visits would be an excellent preventative approach for every child.

The fact that many excellent doctors evaluated this child with every conceivable test and found nothing was a positive factor. If any abnormal pathology had been present, they would have discovered it. Also many forms of trauma to the system can create headache, and the therapeutic effect of craniosacral fascial therapy carries no lifetime guarantee. Once a patient leaves the office setting, she/he is responsible for what happens to her/his body.

SUMMARY

Craniosacral fascial therapy can be an effective approach for children with headache. The continued success of this treatment, which appears to correct the original causative traumas, warrants a pilot study to prove the efficacy of this method.

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