Dynamic Chiropractic

PEDIATRICS

Documenting Care for Children: Will the Profession Answer the Call?

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Chiropractic care of children is on the hotseat today. The media has jumped on this issue with fervor, and we are only seeing the beginning.

Why is this happening? We know there are some individuals that seem to have made it their mission to discredit chiropractic, especially for children. To spend our time battling against their attacks is almost futile. They will not go away, and spending large sums of money on ad campaigns to counterattack may be a diversion of funds that could be put to more productive use.

What is the cause of this problem? If we honestly assess our situation and the advocation of chiropractic care for children, it suggests there is not much empirical evidence available which backs up what we claim. Now, before you raise your anger at what I have stated. Let's take a rational look at what the detractors are saying.

The most repeated claim by opponents of chiropractic is, "subluxations don't exist." This one statement is the root of all negative comment about chiropractic, whether it concerns children or any class of chiropractic patients. If this situation is addressed and answered, it will turn things toward the positive for chiropractic.

There are few in chiropractic today scientifically demonstrating the effects of vertebral subluxation complex to the nerve system, or the response when it is corrected. The profession has seemed to forget that, historically, the reason chiropractic exists is to correct interference to the nerve system caused by vertebral subluxations.

Chiropractors have come to be known as "bone doctors," "spine twisters," "back and neck crackers," where people go to get cracked, popped, stretched, tractioned, vibrated, shocked, massaged, iced, heated, released, cleared, etc. This is the public's perception of chiropractic. Is it any wonder that people appear perplexed when taking a child to a chiropractor is mentioned?

Most of the models used in chiropractic today are purely biomechanical. The neurophysiological component of vertebral subluxation complex is not being addressed except philosophically. It has yet to be determined to what degree structure affects function. The popular terminology also presents a problem. The use of the word "subluxation" in place of vertebral subluxation or vertebral subluxation complex, has been picked up by those outside the profession and is being used against it. "Subluxation," according to the Oxford English Dictionary is a term used by courts in judicial notice issues to describe a partial dislocation of a joint, as in a sprain. Chiropractic uses the term subluxation in conjunction with vertebral, meaning a loss of proper juxtaposition of one or more spinal bones, in a manner which impinges or interferes with nerve transition. Much different from the dictionary term.

A paradigm shift is needed in chiropractic. We can no longer afford to think of vertebral subluxations as bones out of place, squeezing or pinching nerves, if we are going to apply chiropractic to the childhood population or anyone else. Direct biomechanical insult does occur, but it is doubtful that the majority of vertebral subluxations are of this nature.

The newest technology available to chiropractors today is suggesting that vertebral subluxation complex occurs when the spine gets out of its normal range of alignment. This may or may not be visualized on x-rays, or felt during palpation. The condition being referred to is loss of proper juxtaposition. The understanding of how the nerve pathways are affected by the vertebral subluxation complex lies with how each vertebra relates to its neighbor, above and below.

Monitoring physiology is the way to determine if:

1. There is vertebral subluxation complex (VSC) present.

2. The adjustment being administered is correcting VSC.

Once it is empirically demonstrated that VSC is present, the need for care has been established. How is this accomplished? This is where the major contribution of current available technology comes in.

The two types of technology available which document the effect of VSC on the nerve pathways are: low resolution chiropractic thermography and surface EMG (SEMG). These advances in technology enable the chiropractor to monitor manifestations of neurophysiology.

Chiropractic thermography displays surface temperature of the body. This indicates the integrity of the sensory/autonomic nerve system. The rich sensory nerve supply of the vertebral motor unit is affected by loss of proper juxtaposition, VSC. This in turn stimulates sympathetic vasoconstriction by way of the intermediolateral cell column, which results in asymmetrical surface temperatures that are observed on the thermogram.

SEMG monitors the integrity of the motor side of the nerve loop. Loss of proper juxtaposition, VSC, causes asymmetrical muscle activity, which may be seen on static and/or dynamic SEMG scans. Remember the crossed extensor reflex touched upon in neurophysiology class? The abnormal sensory stimulation which occurs in VSC evokes a motor response and muscle contraction. This is technological advancement enables one to observe functional muscle asymmetry.

New advancements in technology, using chiropractic thermography and SEMG, make it possible to demonstrate altered neurophysiology caused by VSC. By properly monitoring patients with this technology, the chiropractor will be able to document how care is affecting the patient, regardless of age.

The profession can no longer afford to make misleading statements such as, "Yes, vertebral subluxation complex can be seen on x-rays." Structure is visualized on x-ray, but not function. Using current technology to monitor patients will provide more reliable and consistent interexaminer opinions on whether a particular patient has VSC or not.

The vertebral subluxation complex is a reality in the pediatric patient, just as in the adult. Its manifestations are observed by chiropractic thermographers and surface electromyographers

everyday. When VSC is corrected, positive change to the nerve system and health of the patient will result.

When an objective model of the vertebral subluxation complex is adopted by the profession (such a model has been proposed, see Stillwagon G & K, An objective chiropractic model. The American Chiropractor, vol. 15, no. 5, Sept. 1993), the needed paradigm shift will begin. A scientifically-based explanation of VSC will be a quantum leap for chiropractic and the reason for providing chiropractic care to patients, especially children. With such a model, controlled studies and testing can take place for the determination of how correction of the vertebral subluxation complex affects health.

The chiropractic profession needs an objective model of VSC. We have models of histological changes (subluxation-degeneration), but no physiologic models. We have biomechanical models, but no functional model. No two chiropractors or techniques seem to agree if a patient has VSC, what level it is at, or when it has been corrected. With an objective chiropractic model, this is possible.

What will be the price of not adopting an objective chiropractic model of the vertebral subluxation complex? We are seeing the beginning. The attacks on chiropractic will continue until they can be scientifically silenced. VSC doesn't affect the health of children or anyone else, just because we say it does. Let's verify it objectively.

References available upon request.

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