

When It Comes to Head Pain, the Head Is Not Alone

The greatest role of the cervical spine, some say, is to serve the cranium. Indeed, it fulfills its role admirably. The cervical spine, with its 37 separate joints, is able to carry out the endless task of allowing the head and neck to move atop the torso and all the while obeying the constant commands from the special senses and reflex mechanisms.

Add to all this the mere fact that the cervical spine obligingly steadies the 9 to 16 lb. head, 14 to 16 hours a day. This is by no means an easy task. First of all the head is not balanced atop the spine as some would have us believe. The head, in fact, is off-balance to the spine with the weight distribution clearly in the direction to cause the head to topple forward if it were not for the posterior cervical musculature. Secondly, the head is rather heavy and a mass of this proportion is not easy to control. There was a time when I used to underscore this point by having one of the sturdy male interns at LACC hold a 16 lb. bowling ball with the elbow resting on the table while I lectured. The forearm served as the "neck" and the hand served as the "atlas" cupping the bowling ball. No one was able to make it through a two-hour lecture.

I think most of us accept the idea that the role of the cervical spine towards maintaining proper function of the head is enormous. Paradoxically, many headache authorities assert that the cervical spine plays but a small role in the overall headache mechanism. Normally, the neck moves 550 to 650 times an hour, 24 hours a day.

Why? Because the cervical spine is involved in nearly all of our everyday activities such as: eating, speaking, emotional reaction, gesturing, sitting, rising, lying down, maintaining airway space, breathing, etc. Reread this list, only this time substitute "the head" for "the cervical spine." There is a big overlap in function between these two structures, isn't there?

Admittedly, we know a lot of facts about head pain. Unfortunately, we know very little about how to put these facts together in a meaningful way so as to explain why some people suffer from head pain and others don't. We know even less factual data about the role of the cervical spine in the generation of head pain, be it temporomandibular (TM) disorders or headaches. What we do know, or seem to know, of the cervical spine seems to come in large part from the intense investigations of the lumbar spine in low-back pain.

However, we cannot, or should not, directly extend the information we have learned from the lower end of the spine to the upper end. First of all, there is a dearth of detailed studies of the cervical spine as compared to the lumbar spine. In this regard, there is a danger in assuming what is true for the lumbar spine must be true for the cervical spine. The most obvious reason is that the cervical spine is designed for an enormous degree of mobility and not for bearing weight. Secondly, the cervical spine is made differently than the lumbar spine. These differences are embryologic, biochemical, biomechanical, etc.

Chiropractic, I have come to learn, has been the most successful in recognizing the uniqueness of the cervical spine. Granted, no one knows exactly what makes the cervical spine unique, but we do know, at least on a clinical level, it cannot be ignored when treating patients with head pain.

With each article I encourage you to write the questions you may have or thoughts to share with your colleagues, to me:

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Editor's Note:

Dr. Curl will be teaching MPI's Temporomandibular ("TM") seminar on October 20-21 in Los Angeles, California. You may call 1-800-327-2289 to register.

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