What is so important about the curvatures of the spine?

Wellness First Chiropractic

The cervical spine sets the stage for the rest of the entire spine .

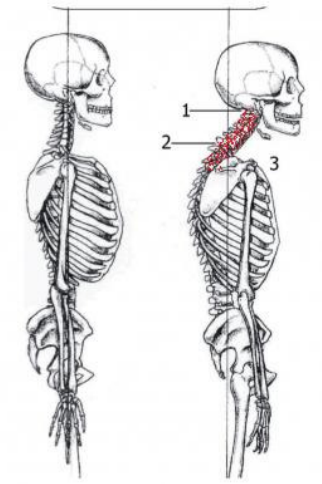
A normal, healthy neck has a small lordosis, which means it curves. In fact, all areas of the spine have curves that, together, help keep the body balanced.

The cervical spine supports the weight of the head, which weighs between 10-14 pounds. With proper posture, the weight of the head is held directly above the center of gravity. In a forward position, the head is held forward of the center of gravity and results in a stress load on the cervical spine that is equivalent to the weight of the head multiplied by the number of inches the head is forward from center.

The spine is a dynamic structure, designed for movement in a wide variety of positions, including flexion, extension, lateral flexion, and rotation of the head. Specialized joints between the base of the skull and the top bone (C1) of the neck allows for over 50% of the flexion and extension of the neck. Specialized joints between the top bone (C1) of the neck and the 2nd bone (C2) of the neck allows for over 50% of the rotation of the neck.

The upper cervical spine has the highest amount of mobility. However, when you increase mobility, you also increase instability. Therefore, the cervical spine is also the most unstable part of the spine.

The cervical spine is susceptible to various forces that cause the vertebrae to lose their proper structural position



(subluxation). Theses types of trauma include macro trauma, such as auto accident/whiplash, sports injuries, and falls; repetitive or micro-trauma, such as work tasks and poor postural habits; and early development trauma, which includes childhood falls and even the birth process.

Cervical spine and surgery.

Cervical spine surgery is often necessary in cases involving major accidents or traumas, but in many cases, the surgery could have been prevented by using a corrective approach. Most cervical spine surgeries involve the removal of part or or all of the disk or bone, and then fusing the vertebrae together with a bone graft. The bone graft may be one of two types: bone taken from somewhere else in the patients body or bone supplied from a cadaver. Often, metal plate screws or wires are also used to further stabilize the spine. Cervical spine surgeries ALWAYS result in loss of function and mobility in the cervical spine.

The rate of spinal surgery in the United States is 40% higher than any other country.

Points of Interest

- *It is normal for the entire spine to have curvatures throughout.*
- *The more forward your head is, the more strain on the muscles of the back of the neck*
- *The upper part of the neck has the highest amount of mobility but also the highest amount of instability.*
- *Forward head posture causes the rest of the spine to lose its normal curvatures as well.*
- *Just a 10 degree loss of normal curve will result in pain or other symptoms.*
- *Abnormal curvature of the neck causes tension directly within the brain stem and spinal cord.*