The Cervical Traction is a simple tool designed to reduce forward head posture and improve the cervical curve.

Why does the curve in your neck disappear?

There may be many different reasons.

Sometimes it is a motor vehicle crash, or an incident of trauma. More often, however, it may develop slowly, over time, as we live day-to-day. Studying in school, working at a computer, or focusing on a project on a workbench often requires that we hold our head downwards and forwards for long periods of time. Eventually, this causes the spine to slip, bit by bit, until the muscles become tight and strong. The body then begins to use these stronger muscles more than the weaker ones, reinforcing the change in posture.

With the loss of the curve in your neck, the nerves that travel through the spinal cord to every single cell in our body begin to suffer. In a straight neck, with no curve at all, the spinal cord is stretched by 10%. If the neck buckles completely, this can increase to as high as 28%! If somebody pulled on your finger until it was 28% longer, you'd probably complain about it a little. The Cervical Traction is a gentle, simple, and practical way to keep your spine -and the nerves that run through it on their way to the rest of your body – at the optimum level of function!

NORMAL

STRAIGHT
(10% increase)

“S”-CURVE
(28% increase)

HOW TO USE THE CERVICAL TRACTION:

1.) **The straight piece should be positioned at the height of your chin.**

2.) **The curved piece is placed behind the neck. The hands should grip the ends of the straight piece (fingers curled towards the wall or away, which ever you prefer). Stand close in against the wall.**

3.) **While looking up towards the ceiling, bend the knees slightly for two seconds as you breathe out. The pressure should be felt on the fingers & behind the neck, and the muscles in the front of your neck should not be strained.**

4.) **Relax for two seconds, breathing in as you come up, then repeat!**

Gentle, quick pulls are more effective than long, strong pulls. This is because the muscles will tense up more with a long, forceful pull. Once the muscles are tense, it is more difficult to move the bones of the neck back into place. Gentle, repetitive motions will bypass the muscles, relax the ligaments, and restore the curve!

Research & References

Spinal Kyphosis Causes Demyelination and Neuronal Loss in the Spinal Cord:

A New Model of Kyphotic Deformity Using Juvenile Japanese Small Game Fowls.
Spine. 30(21):2388-2392, November 1, 2005.
Shimizu, Kentaro MD *; Nakamura, Masaya MD *; Nishikawa, Yuji MD +;
Hijikata, Sadahisa MD +; Chiba, Kazuhiro MD *; Toyama, Yoshiaki MD *

Abstract:
Study Design. Histologic changes in the spinal cord caused by progressive spinal kyphosis were assessed using a new animal model.
Objectives: To evaluate the effects of chronic compression associated with kyphotic deformity of the cervical spine on the spinal cord.
Summary of Background Data: The spinal cord has remarkable ability to resist chronic compression, however, delayed paralysis is sometimes seen following the development of spinal kyphosis. In the past, no animal model to clarify the mechanism of spinal cord damage due to spinal kyphotic deformity has been available.
Methods: Laminectomy and bilateral facetectomy at the C4-C5 level was performed in 52 Japanese small game fowls. Histologic changes in the spinal cord associated with progressive kyphotic deformity were examined at different time points after surgery in each animal. The degree of spinal cord flattening and the severity of demyelination in histologic sections were quantitatively evaluated using an image analyzer, and their association with the kyphotic angle was analyzed. Changes in the microvascular distribution in the spinal cord were also examined by microangiography.
Results: In all operated animals, progressive kyphosis developed reproducibly. The kyphotic angle increased gradually until 3 weeks after surgery and stabilized thereafter. There was a significant correlation between the kyphotic angle and the degree of spinal cord flattening. The spinal cord was compressed most intensely at the apex of the kyphosis, where demyelination of the anterior funiculus as well as neuronal loss and atrophy of the anterior horn were observed. Demyelination progressed as the Kyphotic deformity became more severe, initially affecting the anterior funiculus and later extending to the lateral and then the posterior funiculus. Angiography revealed a decrease of the vascular distribution at the ventral side of the compressed spinal cord.
Conclusions: Progressive kyphosis of the cervical spine resulted in demyelination of nerve fibers in the funiculi and neuronal loss in the anterior horn due to chronic compression of the spinal cord.
These histologic changes seem to be associated with both continuous mechanical compression and vascular changes in the spinal cord.

Can a short spinal cord produce scoliosis?

Eur Spine J 2001 Feb;10(1):2-9

A short, unforgiving spinal cord could produce the abnormal rotatory anatomy observed at the apex in scoliosis, with first lordosis, then lateral deviation and finally a rotation of the vertebral column, with the rotation occurring between the canal and the vertebral body, around the axis of the cord.

Can hindbrain decompression for syringomyelia lead to regression of scoliosis?

Sengupta DK, Dorgan J, Findlay GF.
Eur Spine J 2000 Jun;9(3):198-201
Walton Centre for Neurology and Neurosurgery, Fazakerley, Liverpool, UK.

Scoliosis in childhood develops secondary to syringomyelia in some children. The existing literature does not provide a clear answer as to whether surgical treatment of the syrinx can allow subsequent improvement of the spinal deformity, thus preventing the need for scoliosis surgery. This series comprised 16 patients with syringomyelia who presented with significant scoliosis in the absence of major neurological deficit. All underwent a hindbrain decompression, and follow-up ranged from 1 to 6 years (mean 2.5 years). Subsequent deformity surgery was necessary in eight cases, but the scoliosis was seen to improve or arrest its progression in six (37.5%). Improvement was found to be statistically more likely in children of younger age at the time of syrinx surgery and in those with left thoracic curves. Improvement occurred in 71.4% of those under the age of 10 at the time brain decompression.

Adverse Mechanical Tension in the Central Nervous System: An Analysis of Cause and Effect & Relief by Functional Neurosurgery

Alf Breig, 1978

“In flexion, the dura, cord and nerve-roots are drawn out, the root-sleeves come into contact with the pedicles, and the nerve-roots with the inner surface of the sleeves.”

Funker & Kyle, DDS, “The Dentist’ Contribution to Rehabilitation of Cervical Posture and Function: Orthopedic and Neurological Considerations in the Treatment of Craniomandibular Disorders”

Calliet R, Neck And Arm Pain, Philadelphia, FA Davis Co., 1981

Renee Calliet, M.D., states, "With forward head posture, normal lordosis of the neck and low back is lost." He also states, "The head is the most neglected body part in fitness programs . . . . It's an axiom, that the body follows the head . . . . You can realign your entire body by moving your head. The position of the head is more important than the shoulders and pelvis… For every inch of forward head posture, it can increase the weight of the head on the spine by 10 pounds."

The Shealy Institute in Emporia, Kansas, observed that postural abnormalities caused back pain, headaches and depression. They also found that a slight improvement in the individual's posture decreased their symptoms. They also state that posture affects every physiological function of the body from breathing to emphysema.

Freeman JT., Posture In The Aging and Aged Body, JAMA 1957; 165 (7), pp 843-846

Freeman found that as we get older, deviations in the body's center of gravity caused poor posture, which resulted in intestinal problems, hemorrhoids, varicose veins, osteoporosis, hip and foot deformities, poor health, decreased quality of life and a shortened life span.

J. Lennon, et el, Postural and respiratory Modulation of Autonomic Function, Pain and Health, AJPM, Vol. 4, No. 1, Jan. 1994, pp 36-39.

Lennon states "Observations of the striking influence of postural mechanics have led to our hypothesis that posture affects and moderates every physiologic function from breathing to hormonal production. Spinal pain, headache, mood, blood pressure, pulse and lung capacity are among the functions most influenced by posture.

Gray's Anatomy (pg. 114) states that the cervical spine should have a lordotic curve.