



## cervical traction

**CERVICAL TRACTION IS ONE WAY TO HELP CLIENTS WHO ARE DEALING WITH NECK PROBLEMS**

Any manual therapist in practice knows that neck problems are likely the most common conditions with which clients present. These problems are usually a combination of muscular hypertonicity and hypomobile joint dysfunction, which are like the proverbial chicken and egg. Tight muscles end up restricting joint motion, and restricted joint motion results in protective muscle splinting; in other words, tight muscles.

Rummaging through our tool chest of treatment techniques, there are many approaches that can be helpful. Most every massage therapist is well-equipped to address their clients' necks with Western-based Swedish strokes and hydrotherapy (hot and cold). Stretching is another valuable technique that many therapists employ, and a few therapists explore more specific joint mobilization stretching techniques. However, one extremely valuable treatment technique for the neck that can be used is traction.

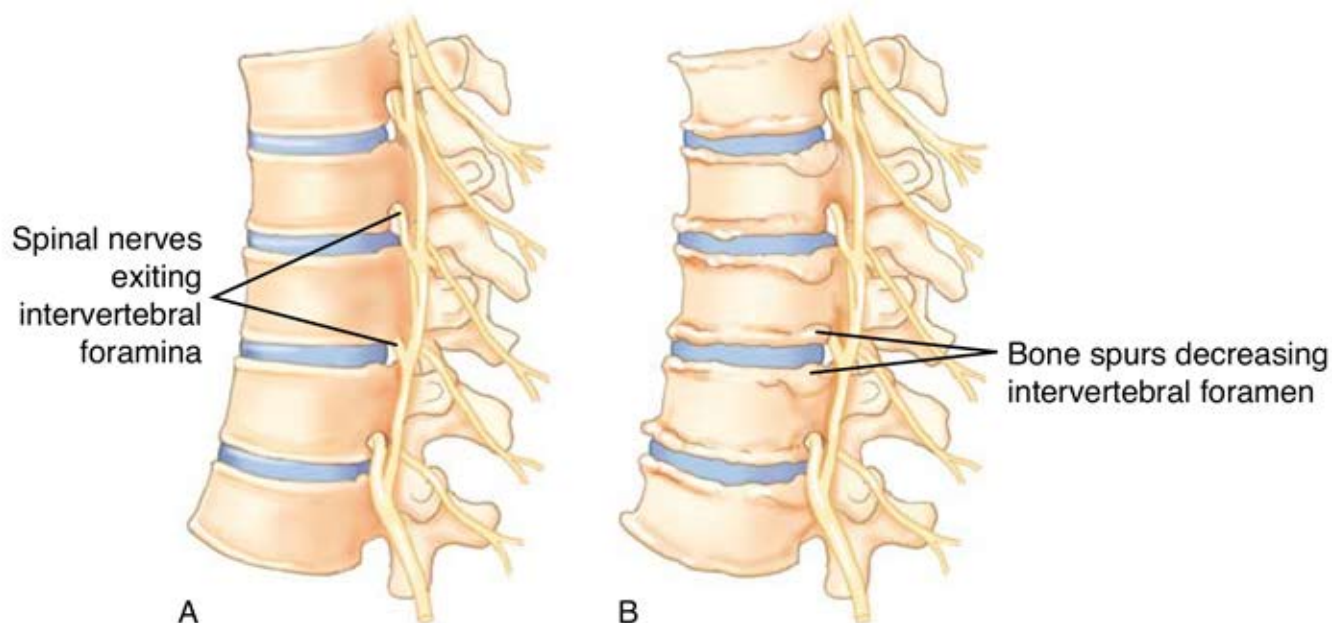
### **Cervical Traction**

Cervical traction is accomplished by pulling the client's head in a cephalad direction, in other words away from the trunk. This approach is clinically therapeutic for two reasons. First, it is a form of stretching that lengthens all

vertically oriented soft tissues of the neck. Second, it decreases the weight bearing compression forces upon the joint surfaces, intervertebral discs and intervertebral foramina of the cervical spine.

When we stretch the neck in the six cardinal plane ranges of motion (flexion, extension, both lateral flexions, and both rotations) or any combination thereof, we introduce a stretching and lengthening force into most every soft tissue of the neck. However, we also create a compression force on the opposite side of the spine. For example, if we stretch the client's neck into right lateral flexion, we do so by moving the neck into left lateral flexion, thereby causing compression to the left side.

Cervical traction achieves a desired stretch, and in fact optimally stretches and lengthens many of the smaller intrinsic tissues of the spine—such as the smaller, deeper muscles and ligaments, as well as the facet joint capsules—but it does so without causing any associated compression force. In fact, cervical traction actually decreases compression throughout the entire neck. This is important because the cervical spine is a weight-bearing structure that is under constant compression force due to the weight of the head whenever we are standing or sitting. Although we can alleviate this weight-bearing compression by lying down, cervical traction actually



**FIGURE 1:** A, LATERAL VIEW OF THE VERTEBRAL COLUMN DEMONSTRATING SPINAL NERVES EXITING THROUGH THE INTERVERTEBRAL FORAMINA. B, BONE SPURS ARE SEEN ENCROACHING UPON AN INTERVERTEBRAL FORAMEN.

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reverses the compression force by creating a lengthening distraction force that opens up the joint spaces between the vertebrae.

Given that compression forces add to the physical forces that contribute to the progression of degenerative joint disease (DJD, also known as osteoarthritis [OA]) and intervertebral disc disease, including disc thinning, bulging and herniation, cervical traction can be helpful for clients who have these conditions.

Weight-bearing compression forces also push the vertebrae down into each other, resulting in a decrease in the size of the intervertebral foramina where the spinal nerves enter/exit the spinal cord. If an intervertebral foramen of the neck becomes too small, compression of the spinal nerve within it is possible, causing referral of symptoms into the same-sided upper extremity. This is even more likely if the size of the foramen is already decreased due to the presence of a pathologic disc or osteoarthritis. When osteoarthritis is present in the cervical spine, the intervertebral foramina are narrowed, and the spinal nerves are compressed.

### The Benefits

As a treatment technique, cervical traction has the advantage of generally being loved by clients. Clients who have chronic neck problems often express that they feel as if they want someone to “pull their head off their body” because of the constant compression they feel in their neck. Cervical traction creates this satisfying distraction force that they instinctively desire.

Introducing a cephalad distraction force also improves the posture of the neck by lengthening it upward. Many manual and movement disciplines speak of optimizing neck posture by imagining a string attaching from the top of the head to the ceiling above. Cervical traction literally creates this pulling force.

### Take Care

Any therapy that has the power to do good also has the power to do harm if it is not performed and applied correctly. The use of cervical traction with clients is common. The

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