

The Pettibon System

Proven spine and posture correction

Pettibon Cervical Traction™

CPT CODE: E0860 Traction Equipment

The clinician or technician teaches the patient how to properly use the cervical traction unit in the office. Written instructions are sent home with the patient. Advise all patients with children to remove the cervical traction from the door after each use. NEVER stand on a stool or other device to use the traction. If the door is too tall, use traction extenders to fit a patient's height.

By the time a person is 12 years old, their spinal discs, ligaments and cartilage no longer have a direct blood supply for the nourishment and elimination of tissue cell wastes. These tissues are then referred to as a-vascular. Avascular tissues require nourishment and waste elimination to function normally, to repair and to regenerate as they did when they were vascular. Motion is now required to pump the nourishing fluids into, and the wastes products out of, avascular tissues such as the spinal discs and ligaments.

It is difficult to correct #2 and #3 cervico-thoracic spinal posture configurations unless repetitive cervical traction is performed prior to adjustment. Repetitive cervical traction also remains a daily activity during rehabilitation and correction of low back problems. This is important because of the effect it has on cervical and lumbar lordosis and lateral spine angle deviations that cause impedance on the cord tracts connected to the brain, low back and legs.

The first reaction to an injury is splinting by the muscle to protect the injured part. however, prevents the motion necessary for nourishment, waste elimination, repair and healing of the injured tissues. Traction and compressive motion rehabilitation should be started as soon as practical.

Researched conclusions regarding the repair and healing of avascular tissues, such as spinal discs and ligaments, during the healing of mobile tissues:

- 1) Cyriax (1982) found immobility was harmful.
- 2) Salter and Oglive-Harris (1994) presented evidence that continuous passive motion caused healing of interarticular fractures. In their experiments they found that chondrogenesis of bone and cartilage was produced by intermittent compression and traction.
- 3) Panjabi, White, Morris and Markoff (1974) used loading and unloading cycles that were initiated by traction and compression of the spine. Their experiments demonstrated a repair mechanism in the spinal disc which is mechanical in nature. Long axis loading and unloading cycles of the injured discs of the spine caused a remarkable "self healing" time. During the third cycle, the motion segment revealed near "intact" behavior again, independent of the type of injury.
- 4) Markoff and Morris (1974) showed that a defect in the annular ring alters the mechanical characteristics of a disc. Loading and unloading traction cycles cause an adjustment that restores near perfect disc function.
- 5) Virgin (1951) performed experiments to determine the physical properties of the intervertebral discs. He found that there was no herniation of the nucleus pulposis due to very high compressive loading. An incision was then made in the annulus fibers all the way to the center, followed by compressive loading. There was very little change in the elastic properties of the disc and definitely no herniation.
- 6) Farfan (1973) proved by a number of tests, that degenerated discs are actually stronger than normal discs when subjected to compressive loading and traction unloading cycles.

Cervical-Dorsal Repetitive Traction Instructions

PURPOSE OF TRACTION: It lowers the neck and upper back resistance to correction. It also improves the cervical and lumbar lordotic curves. It rehydrates thin discs and reduces aches and discomfort in the neck, arm, mid and low back.

WHEN TO USE: For home use, the traction should be performed first thing in the morning, just before bed and as needed (when experiencing neck and/or back discomfort) *throughout the day*.

PREPARATIONS: First, perform cervical warm-up, joint lubrications

and cartilage nourishment exercises (twist, flex and extend the head/neck).

1) Place the hook over the door top, about 8-12 inches from the hinged edge. Loop the rope over the hook, and adjust it for the patient's height. Knots may be tied in the rope to shorten, or extender added to lengthen. The curved piece should hang slightly lower than the back of the head.

***DO NOT** use the provided hook if the door is too wide.

*It **MUST** fit over both sides of the door properly (Fig. #1).

2) **TO TRAIN THE PATIENT:**The handles should be pulled down until stopped by the curved neck piece with the handles at shoulder height. The elbows and knees are placed against the door and the feet shoulder width apart.

3)While holding the handles firmly,relax the knees so some of your body weight is supported by the traction. You should feel some pulling in the low back. The neck should **NOT** go up and down. Traction is applied and controlled by bending the knees (Fig. #2).

4) **TO BEGIN USE BY THE PATIENT:** The curved piece is placed behind the neck and the padded handle under the chin or on the forehead. The patient should place one hand on each handle end, with palms toward their face. Repeat step #3. The traction force is to the patients tolerance. Therefore, up to 90% of the patient's weight is supported by the arms. The cervical spine may supporting only 10% of the weight (Fig. #3).

***TOO MUCH WEIGHT CAN CAUSE MUSCLE SPLINTING AND BLOCKING TRACTION IN THE NECK, MID AND LOW BACK.**

5) Start with 10 to 20 repetitions. Patient adjusts the amount of their weight used for comfort. Add deep diaphragmatic breathing with traction, then exhale completely and forcibly when the traction is released.

6)The patient begins with 10 and works up to 60 repetitions per session.

7)For the TMJ diagnosed patient, use the new traction unit with the large padding. The larger padding will be placed on the forehead, instead of under the chin, and the TMJ will not be aggravated (Fig. #4).

Figure #1

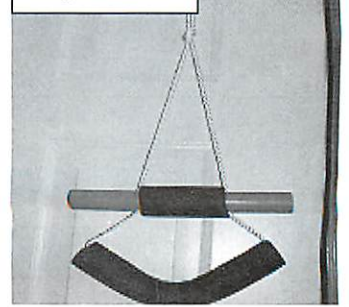


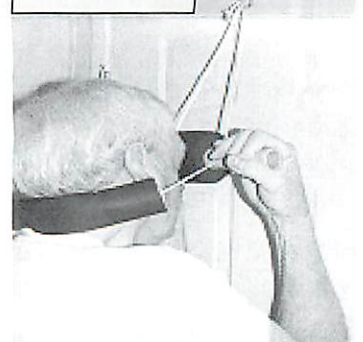
Figure #2



Figure #3



Figure #4



ICE THE NECK FOR 10 MINUTES IF ANY PAIN IS EXPERIENCED.