

# PRONEX® Cervical Traction Device

## Application and Effectiveness

---

Reprint of cover story "Cervical Pain Management in the Home"  
PHYSICAL THERAPY Publication, March 1993, by Ann Lawson, P.T.

### BACKGROUND

Muscular tension in the neck and shoulders has long been a problem for Physical Therapy patients attempting to recover from various forms of cervical dysfunction, both degenerative and trauma induced. As drastic, but necessary changes in our healthcare system occur, we are further pressed to greater efficiency of care with increased responsibility placed on the patient.

Pronex is a manual cervical traction device which is patient controlled via a "pump bulb" similar to a sphygmomanometer. It places the patient in a posturally correct supine position with a cervical lordosis. This position in itself can induce greater relaxation without further influence from the stretching action of the device.

It is commonly accepted that a major cause of disease in today's society is related to the effects of stress. Most of us can easily state that our lives contain too much stress. Often, simply the day to day activity required to support a career and family is at times overwhelming. In addition, as our society becomes increasingly technical in its orientation, we find our-

selves in sedentary patterns of living. Postures of flexion seem to dominate our hour by hour activity with little exception.

The effects of excessive flexion postures in our lifestyle can often lead to postural change, muscular imbalance, and ultimately to adaptive shortening of key muscle groups. Early signs of these changes on our bodies can be:

- increased onset of headaches
- decreasing mobility of spinal joints
- upper extremity sensory symptoms
- general decreased physical comfort

These early changes are often clear predictors of the process of orthopedic degeneration. Diagnostic testing can often reveal degenerative changes in the spine which are much less reversible in nature. As therapists, our approach is often a postural re-education program, which relies greatly on individual patient motivation, desire to change and the self-discipline needed for follow-through. Unfortunately, many people who have the greatest of intent, make poor patients, in that they are not able to follow through with regular home programs. We all know

patients who fit into this category, perhaps even ourselves! Very often, many of us can state that the best motivator that we know is pain. It is unfortunate that a person's physical condition must regress to the point of pain before they choose to respond to their needs.

Pronex is a device that is intended for the patient who is independent, capable of using good judgement, and who needs "fast" results when their symptoms exacerbate. It is highly portable, easily used and often very effective in almost immediate reduction in muscle tension-related discomfort. Patients are taught to use this device in the clinical setting, with the Physical Therapist teaching both the postural and intensity levels to the patient. Similar to the "perceived exertion scale" used in Cardiac Rehabilitation, the manufacturers suggest the use of a "perceived stretch scale" in training patients to use the Pronex.

The levels of perceived stretch being used at this time are as follows:

- mild stretch
- moderate stretch
- high moderate stretch
- maximal stretch

In our experience, use of the patient's subjective sense of the level of stretch is a far better way to provide consistent intensity levels than any gauge device could

offer. In other words, the patient will be likely to vary from day to day with their tissue status. In practicality, we have found the perceived stretch to be a more effective way to gauge proper dosage than a numerical value. The responsiveness of tissue to passive stretch seems to be contingent on the following:

- degree of muscle spasm/tension
- emotional status of patient
- degree of tissue congestion
- chronicity of patient

All of these factors affect how readily the body will respond to the action of the Pronex device.

## PATIENT SELECTION

Pronex has proven to be successful for cervical dysfunctions of many types. While the patient with muscular tension is the most appropriate type of person for the Pronex, a patient with degenerative joint disease, stenosis or spinal instability can also experience good relief from its use. Early use of Pronex following whiplash trauma can greatly reduce the irritability of the patient, allowing for more rapid return to the sub-acute phase. Supervision by a Physical Therapist for patients of this type is recommended, mainly as their response to the Pronex may determine that specific adjustments be made to their usage program.

## PRODUCT DESCRIPTION

Pronex is designed to be used only when the patient lies supine. In this anti-gravity posture, the posterior neck is able to rest into the Pronex device, which in itself can promote greater relaxation. As the patient lies in the device un-inflated, the anatomic cervical lordosis is supported. The inner contours of the head cushion of the Pronex are designed to contact the mastoid processes and the occipital ridge of the head. As contours of the head are greatly variable from person to person, the precise place of greatest contact with the device varies as well. Persons with very prominent mastoid bones will feel the bulk of the stretch there, where other persons will report a more diffuse, general pull across the entire occiput. The gentle concavity built into the shoulder contact on the lower pad has generally been comfortable to most persons using the device.

Pronex is made in three sizes: regular, large and wide. The wide size is built for the “bull necked” or very thickly built patient who needs a broader sized upper head piece, and variations built into the shoulder piece to accommodate a more anterior-posterior chest depth. Occasionally we will find a patient that is unable to make use of the Pronex because they either lack the necessary contours at the occiput or find the upper head cushion to be painful to them. Patients are generally instructed to lie in the bent knee (hook lying) position to begin use of the Pronex.

We have found that the necessary muscular relaxation is more likely to occur readily if the lumbar spine is in a relaxed, neutral position. Review of patient’s style of breathing is also recommended in the initial training for use of the Pronex. If the patient is an exclusive upper chest or shallow breather, training in diaphragmatic or belly breathing is very important. Often a big factor helping a patient to experience success with this device lies in their ability to “unlock” holding patterns in the cervical and upper thoracic regions. If the chronicity of their pain has caused them to develop long standing muscular or postural compensation, then they in turn will have to “unlearn” this holding pattern to allow the Pronex to offer them the optimal relief it is designed to do.

## TECHNIQUE

Teaching appropriate breathing patterns while using the Pronex has been highly effective in helping patients to achieve success with this device. We suggest the use of the “melt technique” or having the patient visualize actually melting as they exhale. This method has been most effective in communicating the kind of relaxation a person should strive for with use of the Pronex.

During the initial phases of use of the Pronex, a patient may restrict their use of the stretch portion of the device to only mild or moderate levels of distraction. While working the muscles in this range,

they can more readily learn the concept of “melt” or relaxation of the cervical muscles while eliminating risk of exacerbating their symptoms.

We have seen success with patients also diagnosed with Thoracic Outlet Syndrome, as long as their levels of stretch are brought up gradually and with careful supervision of their ability to relax the appropriate key muscles in the lateral neck. The anticipated increase in upper extremity symptoms from a misdirected pressure on the shoulder has not proven to be frequent in the cases tried thus far. In addition, the application of a gentle controlled stretch to the muscles of the neck has often helped patients to work more effectively on improving their breathing technique. In other words, it seems to place the patient in a position of advantage to better enable them to learn the skill.

## SUMMARY

In conclusion, our experience with the Pronex cervical traction device has been consistently positive. Its very design and

application make it user friendly with almost immediate relief of muscle tension related symptoms for many patients.

For the independent, self-directed person, the addition of the Pronex to their options for handling spinal dysfunction is welcomed. We see many persons using Pronex rather than medications, or repeat courses of Physical Therapy. In addition, regular application of this device often leads the user to increased awareness of muscular tension and postural imbalance. If our role as Physical Therapists is to truly rehabilitate the patient and return them to their highest productivity as a person, then perhaps the Pronex will be one of the devices that can more efficiently help us to attain that goal.



**PRONEX®** is manufactured by:  
GLACIER CROSS, INC.  
Kalispell, Montana  
(800) 388-4828  
(406) 257-8822  
(406) 257-8880 FAX  
[www.glaciercross.com](http://www.glaciercross.com)  
[pronex@glaciercross.com](mailto:pronex@glaciercross.com)