

MFR Techniques

By John F. Barnes, PT
(Special to the Forum)

MYOFASCIAL CERVICAL TRACTION—PART 1

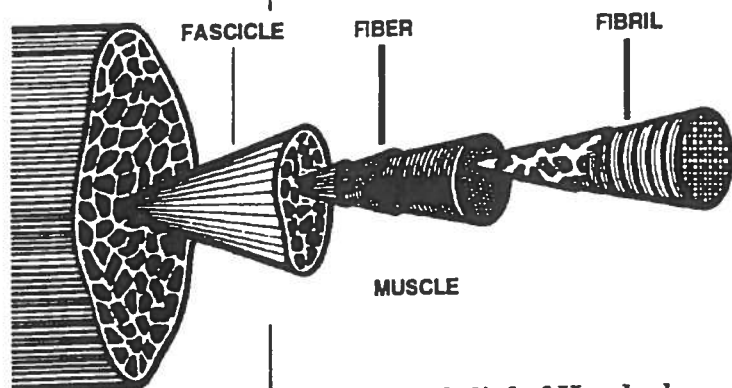


FIGURE 1—
Muscle. (Williams
& Wilkins, ©1983.)

For the Relief of Headaches and Cervical Pain and Dysfunction

There is no such thing as a muscle. To say the least, that is a revolutionary statement from a physical therapist with more than 30 years of experience. However, my experience is now being supported by recent dissection studies by Nikolai Bogduk, MD.

A re-evaluation of the anatomy and function of the spinal musculature, fascia and osseous structures to which they attach and influence has been reported by Nikolai Bogduk, MD, at the American Back Society Symposium.¹ The following is from the Summer 1991 issue of the *American Back Newsletter*.

Dissection studies of the lumbar back muscles have permitted a transformation of perceptions of their structure. Models depicting individual muscles as single force-equivalents are invalid. Each back muscle consists of multiple, individual, and small fascicles each with discrete, constant and segmental attachments.

However, because of the segmental, fascicular anatomy of each muscle, a given offending movement may effect only particular fascicles. Thus,

rather than involving the muscle as a whole, sprains may occur as selected, specific sites resulting in focal tenderness.

—Nikolai Bogduk, MD

The illustration in Figure 1 is from Janet Travell's book *Myofascial Pain and Dysfunction*. It represents the myofascial element²: every muscle of the body is surrounded by a smooth fascial sheath, every muscular fascicle is surrounded by fascia, every fibril is surrounded by fascia, and every microfibril down to the cellular level is surrounded by fascia (Figure 1). Therefore, it is the fascia that ultimately determines the length and function of its muscular component.

The fascial tissue covers the muscles, bones, nerves, organs, and vessels down to the cellular level. Therefore, malfunction of the system due to trauma, poor posture, or inflammation can bind down the fascia, resulting in abnormal pressure on any or all of these body components. It is thought that this binding down, or restriction, may be the reason for many of the poor or temporary results achieved by conventional medical, dental, and therapeutic treatments.

Restrictions of the fascia can create pain or malfunction throughout the body, sometimes with bizarre side effects and seemingly unrelated symptoms that do not always follow dermatomal zones. It is thought that an extremely high percentage of people suffering with pain, lack of motion, or both may have fascial problems. Most of these conditions are undiagnosed, however, as many of the standard tests, such as radiographs, myelograms, computerized tomographic scans, and electromyograms, do not show the fascia.



Please send your suggestions, case histories and questions along with your address and phone number to:

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Myofascial Cervical Release

The cervical release is an excellent technique to relieve fascial restrictions through the cervical and upper thoracic areas. After it is performed, muscle energy and manipulation and mobilization techniques can be done with increased ease and effectiveness. Often the cranial base release is more effective after this technique.

Position the patient supine, far enough off the table so that the axillae are level with the table edge. Bend your knees, then gently flex and cradle the head (your fingers direct toward the ceiling) as if you are about to do a two-handed basketball shot.

Then come into a standing position, lifting the patient by the occiput, until you are comfortably and fully upright with the patient's occiput resting on the heels of your hands (Figure 2). Your fingers should loosely cover the patient's ears without gripping or squashing them. The patient's body may be resting against you. This will still allow the cervical stretch to occur. Avoid too much cervical flexion, however, as this is uncomfortable. Do *not* put pressure on the mandible.

To increase stretch, maintain the height of the patient's head while bending your knees. Stand up straight again and this will lift the patient's head even more. To bring the patient back to neutral, lower the patient to the table, swiveling your hands to maintain traction throughout.

The starting position for this technique is very important. If the patient is too far on the table, you will compromise your



Figure 2—

The shoulders can rest against the therapist's abdominal area.

own body mechanics. Once the patient is lifted, the position should be comfortable and balanced for both you and the patient. For a large person, this procedure may be started with the patient in the sitting position. Cradle the patient's occiput in your hands as described previously. Maintain gentle cervical traction as you guide the upper body backwards until the shoulders rest on your abdomen or chest. Hold for three to five minutes.

If the patient is having difficulty relaxing in this position, encourage deep breathing for full relaxation.

REFERENCES

1. *American Back Society Newsletter*, Volume 7, Number 3, Summer 1991.
2. Travell, J. *Myofascial Pain and Dysfunction*. Baltimore: Williams and Wilkins, 1983.
3. Barnes, J. *Myofascial Release: the Search for Excellence*. Paoli, Pennsylvania: MFR Seminars, 1990.

Contraindications

Contraindications for myofascial release, such as malignancy, aneurysm, and acute rheumatoid arthritis may be considered absolute, while others, such as hematoma, open wounds, healing fractures, etc., may be regional.

malignancy
cellulitis
febrile state
systemic or localized infection
acute circulatory condition
osteomyelitis
aneurysm
obstructive edema
acute rheumatoid arthritis
open wounds
sutures
hematoma
healing fracture
osteoporosis or advanced degenerative changes
anticoagulant therapy
advanced diabetes
hypersensitivity of skin

Myofascial mobilization techniques are effective in relieving pain and restoring motion and are designed to be combined with appropriate modalities, massage, mobilization and neuromuscular facilitation technique, exercise and flexibility programs, NDT, sensory integration and movement therapies.