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Benefits of Myofascial Release, Craniosacral Therapy Explained

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(Special to the P.T.F.)

Myofascial release and craniosacral therapy are revolutionary new approaches for physical therapists who wish to relieve pain and restore function. These techniques are a non-invasive, gentle and excitingly effective addition to the physical therapist's repertoire of techniques used to help others.

The importance of the role of the fascial system in pain and dysfunction recently has been discovered and documented by Dr. John Upledger, chief of research at Michigan State University, where one of the leading biomechanical research labs in the country is located. It is now thought that malfunction, or the binding down of the fascia may be the reason for many of the poor or temporary results encountered in physical therapy.

The fascia is a tough connective tissue which spreads throughout the body in a three dimensional web from head to foot without interruption. The fascia surrounds every muscle, bone, nerve, blood vessel and organ of the body, all the way down to the cellular level. Therefore, malfunction of the fascial system due to trauma, posture or inflammation can create a binding down of the fascia, resulting in abnormal pressure on nerves, muscles, bones

or organs. This can create pain or malfunction throughout the body, sometimes with bizarre side effects and seemingly unrelated symptoms not always following dermatomal lines. It is thought that an extremely high percentage of people suffering with pain and/or lack of motion may be having fascial problems. But most go undiagnosed since the importance of fascia is just now being recognized. Many of the standard tests, such as X-rays, myelograms, CAT scans, electro-myography, etc., do not show the fascia.

The fascia can be broken down into three arbitrary divisions:

- Superficial fascia - lies directly below the dermis.
- Deep fascia - surrounds and infuses with muscle, bone, nerves, blood vessel and organs of the body all the way down to the cellular level.
- Deepest fascia - is within the dura of the cranial sacral system.

Represented is a whole body phenomenon when one considers that these are arbitrary divisions. The superficial fascia affects the deep fascia, and the deep fascia affects the fascia within the craniosacral system and vice versa. Fascia at the cellular level create the interstitial spaces and have extremely

important functions in support, protection, separation, cellular respiration, elimination, metabolism, fluid and lymphatic flow. In other words, it is the immediate environment of every cell of the body! It means then, that any trauma or malfunction of the fascia can set up the environment for poor cellular efficiency, disease, pain and dysfunction throughout the body.

The cranial sacral system has an energy which pulsates throughout the head and body six to 12 times per minute under normal conditions. The dura attaches to the endosteum inside every cranial bone, has a firm attachment to the foramen magnum at C-2 and 3, and continues down the dural tube to the second sacral segment, which then fuses with the sacral-coccygeal segment. Torsion within this system accounts for the connection between the head, lower back and sacrum.

For example, should an individual fall on his ilium or sacrum, creating a binding down within the fascia of the dural tube, the individual could eventually end up with seemingly unrelated headaches. Until there is a release of the fascia in the sacral or lumbar area, the headaches will not be resolved no matter how many good treatments are given to the head or neck area.

Although we have all been taught

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that the cranial bones do not move, it has now been documented in over 300 studies that the cranial bones do move via the mechanism of the cerebral spinal fluid. Production in the choroid plexus of the ventricles of the brain increases the pressure within this semi-enclosed hydraulic system. The arachnoid granulation body, which is a sinusoidal plexus of blood vessels that becomes engorged, acts like a ball valve mechanism in the straight sinus. This blocks the great cerebral vein and increases the pressure within the cranial vault. This gaps the cranial sutura which are under hemostatic control. At a certain point, as the sutura spread, a signal is sent to the brain to cut off the production of cerebral spinal fluid. When the cranial sutura compress again, the inter-sutural material becomes compressed and sends a message to the brain to resume production of the cerebral spinal fluid. This has an effect not only on the cranium, but also throughout the body. So if there is a binding down of the fascia anywhere in the body, of the extradural fascia, or within the dura of the cranial sacral system, there can be profound and deleterious affects throughout the body. These can affect the individual's health and feeling of well-being and can create pain and dysfunction.

Refine Palpation Skills

Therapists are taught at my seminars to refine their palpation skills utilizing their proprioceptive senses for evalua-

tion and treatment. Using gentle, subtle pressure with their hands, therapists evaluate the amplitude, rate, quality and strength of the craniosacral motion. The therapist then applies gentle pressure in a specific direction for a specified amount of time. A release then occurs, signaling a change in the collagenous or plastic component of the fascia, which can mean a permanent, positive structural change. This change alleviates the excessive pressure upon nerves, blood vessels, muscles, bones, etc.

The exciting aspect of myofascial release and craniosacral therapy is that they are ideal for the physical therapist with his knowledge of anatomy, kinesiology and body mechanics. So often we as physical therapists have been treating symptoms without realizing it. Myofascial release and craniosacral therapy allow us to identify and treat the cause of problems, thus eliminating some of the poor or temporary results that have been seen in physical therapy throughout its history. The effectiveness of these techniques gives the physical therapist the opportunity to be a true professional.

In my 24 years of experience, I haven't seen any techniques that are so effective in reducing pain and restoring function, and at the same time, are gentle and non-invasive. As the effectiveness of these techniques becomes widely known, physical therapists will be in great demand. With his background, a physical therapist can easily

learn these techniques in a weekend continuing education seminar. These treatments are ideal for those who have no mobilization experience. Also, those experienced in mobilization are beginning to realize these techniques add another dimension to their treatment repertoire.

It has been found that it is far more effective to treat the whole body and its important inter-relationships than merely focus on one or two joints at a time. The therapist can immediately return to his office, hospital or extended care facility and use these procedures with confidence and effectiveness.

Myofascial release and cranial sacral therapy are very versatile. They have been found to be very effective in a hospital setting, private practice, sports medicine facility, geriatrics, pediatrics, and with people with temporo-mandibular joint problems. As I visit around the country teaching physical therapists, physicians, and dentists the techniques, I find it exciting to see this positive change and evolution. Challenging and stimulating, myofascial release and craniosacral therapy should help end any therapists' complaints about burn-out.

John F. Barnes, R. P. T. presents Myofascial Release Seminars, based at 30 S. Valley Road, Paoli, P.A. 19301, phone (215) 644-0136.
