MFR Techniques
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(Special to the Forum)

Myofascial release can produce consistent results in children suffering with orthopedic problems, scoliosis, birthing injuries, head trauma, cerebral palsy and other neurological and movement dysfunctions.

Myofascial release is safe, effective and designed to be utilized with appropriate modalities, mobilization, exercise and flexibility programs, neurodevelopmental treatment (NDT), sensory integration and movement therapy.

Myofascial Release Theory

Fascia is a three dimensional web of connective tissue which runs continuously throughout the body from head to foot and superficial too deep without interruption. It does not have origins or insertions, as do muscles. Rather it runs continuously throughout the body lending support and separation to all systems.

For teaching purposes, fascia is divided into three layers: the superficial fascia lies beneath the skin and connects the skin to muscles and tissue just beneath it. It also surrounds and infuses with muscles, nerves, arteries and bones. The deep fascia is considered to be the abdominal, visceral, pleural and pericardial connective tissues, and the deepest fascia is the dural fascia which covers the brain and spinal cord.

I functions to support structures by holding tissues together, as well as separating structures so they may have mobility without friction. Example: fascia holds the biceps together as a group, while simultaneously separating individual muscle fibers for isolated contractile ability.

Fascia is composed of an elastocollagenous complex with elastin fibers (which lend elasticity and tissue memory), and collagen fibers (which lend strength), embedded in a gelatinous ground substance which allows fiber mobility, as well as cellular circulation.

Muscles do not exist in isolation. Muscles are actually groups of myofibrils/myofibers/myofascicles which are bound together by fascial envelopes. The muscular fascia (perimysium) runs continuously into the osseous fascia (periosteum) which joins the periarticular tissue as well.

The vertebral column is supported in space by the myofascial system, just as a tent pole is supported by the guide wires. The system was designed to work in a balanced, symmetrical position. When using myofascial release techniques, a primary goal is to improve structural alignment and reduce abnormal pressure on pain sensitive structures that may be producing the symptoms of pain, spasm or abnormal tone.

Fascia reorganizes itself along the lines of tension imposed upon it in order to support the structure. Where there is excess stress, fascia will thicken to add strength and support. Although connective tissue functions to support our posture and motion, it does not evaluate how we can equally reinforce poor posture and motion, as it does efficient movement.

Introduction

The purpose of deep myofascial release is to release restrictions (barriers) within the deeper layers of fascia. This is accomplished by a stretching of the muscular elastic components of the fascia, along with the crosslinks, and changing the viscosity of the ground substance of fascia.

Technique

With relaxed hands, slowly stretch out the elastic component of the fascia until you reach a barrier. At that point, maintain sufficient pressure to hold the stretch at the barrier and wait a minimum of 90 to 120 seconds, usually longer. Do not try to force through the barrier. Prior to the release, you my perceive with your proprioceptive senses a heat build-up or a throbbing or fluttering sensation. The patient may also notice a heat build-up, a throbbing sensation called therapeutic pulse, or a temporary increase in pain. As the restriction barrier releases, you will feel motion under your hands. Go with the motion and the patient may notice that the pain subsides and you both will feel a softening effect. Continue your pressure as long as the motion persists.

There may be multiple barriers, so continue to hold, going through barrier after barrier until all is quiescent. Be gentle. Do not try to force the patient or aim the direction in any way. Merely engage the barrier, wait, and go with it wherever it takes you.

Leg Pulls

Leg pulls are highly effective myofascial release techniques which affect many areas simultaneously. Please remember the following: Use a very small amount of traction. You should not be feeling the child pull back against you. Hold the gentle traction for approximately 3-5 minutes or longer per leg.

Stay within the available, painfree range. In the spastic child, begin proximally and work distally with the child's comfort zone. You can concentrate on one joint at a time, especially initially. Begin slowly and monitor the child's response as you go. You can always come back and do a little more next time. With leg pulls, please use a little force over a prolonged time. It is not the amount of force that creates the release, rather it is the low load over time. Use your best judgment. If you are not sure about your pressure, lighten up. Any doubt at all…less pressure, more time.

Just like when using any other technique, reassess as you go. Change the structural alignment, following with techniques to help the child integrate the change. Myofascial Release, exercise, NDT and SI techniques blend and complement the effectiveness of each other.

(Excerpted from the Pediatric Myofascial Release Seminar Workbook, 1991.)

No References

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

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CONTRAINDICATIONS OF MYOFASCIAL RELEASE

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

Before any treatment is undertaken, a thorough diagnostic workup by a physician should be performed to rule out organic disease. Additionally, a comprehensive history and evaluation always precedes treatment. As few situations are "black and white," specific contraindications may not void the use of certain techniques in another region of the body, and the absence of stated contraindications should not be taken as a signal to proceed without careful thought. In general, consider the immediacy of need and the benefits of treatment versus risks, when confronting regional contraindications.

Head and neck treatment in Down's Syndrome-cervical stability should be ascertained.

With spina bifida, proceed very cautiously, treat sparingly and assess the response as you go.