

Review of Myofascial Release as an Effective Massage Therapy Technique

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Massage is a manual therapy technique that has been practiced for centuries. Massage treatments can be traced as far back as 2,000 B.C.¹ Massage therapy is the manual manipulation of soft tissue to promote health and well-being.¹ In its different forms, massage therapy has been used to treat a variety of conditions. It can be used to relieve stress; alleviate pain; increase fluid mobilization

and soft tissue mobility; decrease heart rate, blood pressure, and anxiety; as well as many other beneficial outcomes.¹⁻⁵ Massage therapy appears to be safe, yield high patient satisfaction, and reduce pain and dysfunction.⁶

Fascia is a tough sheet of connective tissue that envelopes muscles and fascicles

(bundles of muscle fibers). It is composed of collagen, elastin, and ground substance.^{2,8} Myofascial release is a massage technique that focuses on soft tissue that is tight or in spasm. The source of the tightness can be muscle spasm, soft tissue adhesions, scar tissue, and/or excessive release of acetylcholine.^{1,3,7-10} These areas of muscle spasm are often referred to as trigger points or myofascial trigger points.^{7,10-14,17} A myofascial

trigger point is “a hypersensitive palpable nodule within a taut band” of muscle tissue,¹¹ most often found in the belly of a muscle, as opposed to its tendons or insertion points.^{13,14} They are classified as either active and latent trigger points. Active myofascial trigger points produce symptoms of local or referred pain, whereas a latent trigger point will only be painful when stimulated.¹¹

To locate a trigger point, the clinician palpates the muscle perpendicular to its fibers, feeling for a taut band of tissue.¹¹ Once a taut band of tissue is identified, the athletic trainer or therapist moves along the band and identifies the most tender and/or rigid spot.¹¹ Two types of myofascial techniques have been identified in the literature. One technique involves application of direct, focused pressure to the adhesion or spasm, whereas the other technique involves a slow sweeping pressure (Figures 1 and 2).^{1-3,8-14} The slow sweeping pressure promotes soft tissue extensibility, and breaks up adhesions and scar tissue. Direct pressure breaks up adhesions and muscle spasms. These techniques are administered with a similar protocol; pressure is applied to the area of spasm for 60–90 seconds, but may be held as long as five minutes, and then gradually released.^{8,9,12} Soft tissue mobilization starts superficially and works to the deeper layers of soft tissue.^{2,10} Direct focused pressure, used to relieve soft tissue adhesions or muscle spasms, is often referred to as trigger point

KEY POINTS

- ▶ Myofascial release can be an effective in alleviating pain and muscle spasms.
- ▶ Myofascial release can improve soft tissue extensibility.
- ▶ Myofascial release can be a cheap and very effective treatment option.
- ▶ Myofascial release techniques can be learned quickly.



Figure 1 Trigger point myofascial release.



Figure 2 Sweeping pressure.

release. A clinician who uses myofascial release should be familiar with the precautions and contraindications of this modality. Table 1 includes a list of precautions and contraindications.

The purpose of this report is to present peer-reviewed research findings that will answer the following clinical questions: (a) Are myofascial release techniques effective in alleviating pain? (b) Can myofascial release techniques relieve muscle spasm? (c) Will myofascial release techniques improve soft tissue extensibility? Articles were chosen on the basis of relevance to the research questions and were selected from the full-text, peer-reviewed online databases of California University of Pennsylvania's Manderino Library. Full-text article searches were conducted in the Health Science Databases Collection (which includes CINAHL), Health Source: Nursing/Academic Edition, MEDLINE, and SPORTDiscus. Search terms included the following: myofascial release, trigger point, myofascial trigger points, trigger point massage, massage, massage therapy, deep tissue massage, acupressure, and soft tissue mobilization.

Effect on Pain

Are myofascial release techniques effective in alleviating pain? Twelve of the articles reviewed found that myofascial release techniques were effective in alleviating pain; however, findings were inconclusive concerning the mechanism by which myofascial release

TABLE 1. PRECAUTIONS AND CONTRAINDICATIONS FOR MYOFASCIAL RELEASE.^{3,9,19}

Precautions	Contraindications
Congestive heart failure	Malignancy
Organ failure	Infection
Bleeding disorders	Osteoporosis
Skin fragility	Acute rheumatoid arthritis
Edema	Acute fractures
Certain types of cancer	Advanced degenerative joint disease
	Blood clot/deep vein thrombosis
	Obstructive edema
	Skin lesions
	Open wounds
	Acute injury or surgery in treatment area
	Hyperesthesia
	Advanced diabetes
	Goiter
	Cortisone therapy or blood thinners