



# THE CASE FOR PAIN RELIEF

## 5 RESEARCH STUDIES FOR MASSAGE THERAPISTS



# Introduction

## *Massage and pain relief*

As a massage therapist, you work with many clients with different types of conditions. Many of them come to see you seeking help for pain management.

At The Massage Therapy Foundation (MTF), we want to provide the tools and resources you need to serve your clients and enhance your business. These current research article reviews will help you approach your work with the confidence that comes from knowing the work you do is evidence-based.

### **WE WILL COVER:**

- ▶ *Acupressure and chronic neck pain*
- ▶ *Massage therapy and hand pain*
- ▶ *Thai massage and pain relief*
- ▶ *Massage therapy and low back pain*
- ▶ *Myofascial release and fibromyalgia*

### **ABOUT THE ARTICLES**

The article reviews in this eBook were compiled from a monthly column published in *Massage Today*, "Research with the Massage Therapy Foundation." The reviews were written and contributed by a team of dedicated Massage Therapy Foundation volunteers, members of the MTF Research Writing Committee.

In this column, the writers translate current research studies into a manageable format to make research more accessible to you. You can access the entire archive of reviews at [www.massagetherapyfoundation.org/ReviewArchive](http://www.massagetherapyfoundation.org/ReviewArchive).

This research review program is one way the Massage Therapy Foundation promotes research literacy and capacity in the profession, promoting our mission of advancing the knowledge and practice of massage therapy through scientific research, education and community service.

We hope you can use this collection of research reviews to help you enhance your massage therapy practice. To support e-books and other work by the Massage Therapy Foundation, please consider making a [donation](#).

# Research Shows Acupressure Reduces Chronic Neck Pain

*A review of the study "Comparative Effects of Acupressure at Local and Distal Acupuncture Points on Pain Conditions and Autonomic Function in Females with Chronic Neck Pain" published in Evidence-Based Complementary and Alternative Medicine*

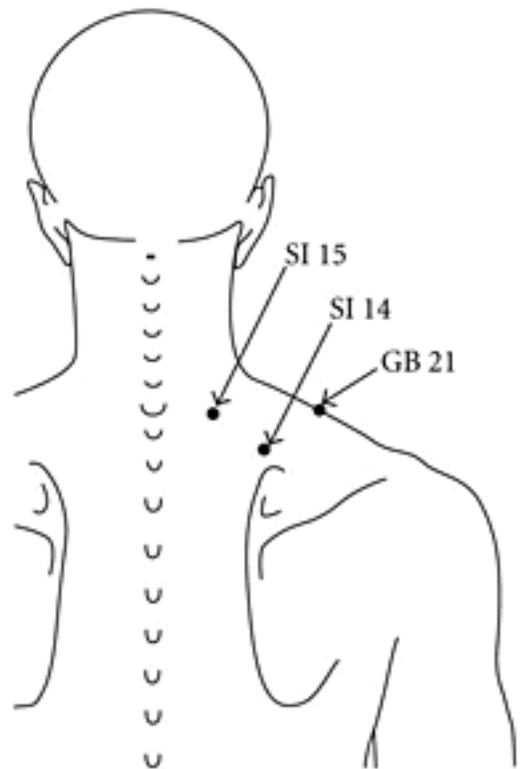
*Contributed By Derek R. Austin, MS, CMT, April Neufeld, BS, LMT, NCTMB, Sandra K. Anderson, BA, LMT, ABT*

Widely accepted in Japan, many Americans are unaware of the many benefits of manual acupressure. It is a noninvasive technique in which, instead of needles, the practitioner's fingers press on traditional acupuncture points. Acupressure has been shown to be calming, relieve pain and induce relaxation.

Lead author Dr. Takako Matsubara, PT, an Associate Professor in the Department of Rehabilitation at Nihon Fukushi University, Japan, and his colleagues studied an area of interest to most massage therapists - chronic neck pain. Their research article, "Comparative Effects of Acupressure at Local and Distal Acupuncture Points on Pain Conditions and Autonomic Function in Females with Chronic Neck Pain" was published in the journal Evidence-Based Complementary and Alternative Medicine.

Matsubara and colleagues randomly allocated 33 female subjects (n=33) to three groups. Group one subjects received acupressure at three tender points consistent with local acupuncture points (LP) "jianjing" (GB 21), "jianwaishu" (SI 14), and

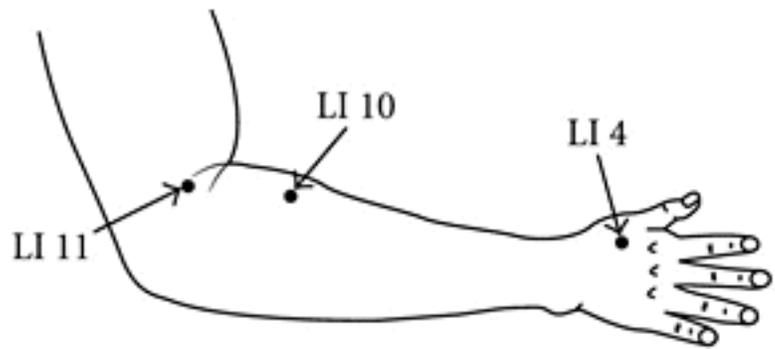
"Jianzhongshu" (SI 15). These local acupuncture points align with tender points in the trapezius muscle with acupressure (see Figure 1). Group two subjects received acupressure at three distal acupuncture points (DP); in this study, distal meant points distal to the location of the neck pain. These points were "Hegu" (LI 4), "Shousanli" (LI 10), and "Quchi" (LI 11). These distal acupuncture points are traditionally associated with neck-shoulder-arm disorders in Chinese/Japanese traditional medicine (see Figure 2). A third group, termed the control, received no acupressure at all.



Subjects were assessed about pain intensity using a verbal rating scale (VRS); the intensity of neck pain or stiffness was evaluated on a numerical scale from 0 to 3 (0: no pain, 1: mild pain, 2: moderate pain, and 3: severe pain). Subjects were also assessed about pain-related disability using the Neck Disability Index (NDI), pain-related anxiety using State-Trait Anxiety Inventory-I (STAI-I), and about muscle hardness (MH) on bilateral trapezius muscles. Pain-associated stress was assessed using salivary alpha-amylase (sAA) activity and heart rate variability (HRV) to determine parasympathetic and sympathetic activity. Low electrical frequency fluctuations in heart are indicators of sympathetic and parasympathetic activity, and high electrical frequency fluctuations are indicators of parasympathetic activity.

Parasympathetic and sympathetic activity in the test subjects was measured because several previous reports showed that the effects of acupuncture and acu-

pressure are due to influencing the autonomic nervous system. The acupressure treatment lasted about ten minutes per session. Three sets of acupressure were applied with thumb pres-



sure in a rotary fashion at 20-25 cycles per minutes for 30 seconds on each of the three assigned local or distal points on the right side of the subject's body; the same procedure was followed on the left side. The same investigator applied acupressure in all cases.

There were no significant differences among the three groups pre-treatment. There were no measured changes in pain, stiffness or autonomic activity in the control group throughout the study. However, in the LP and DP groups, the VRS, STAI-I, and MH significantly decreased immediately following treatment, indicating a decrease in pain and stiffness. The next day, the NDI was significantly lower compared with pre-treatment in the LP and DP groups. The subjects' heart rates significantly decreased and high frequency component of HRV significantly increased, indicating a parasympathetic autonomic response, only in the LP group.

This study is notable for its use of both local and distal acupressure therapy. Both appear to be effective in relieving chronic neck pain in only a single ten minute session, with significant next-day effects on the NDI, a validated measure of pain-related disability. Interestingly, reduction in pain in the LP and DP groups as assessed by the VRS were not significantly different from the control group at the one day follow-up.

This study by Matsubara et al., is limited by the lack of longer term follow-up beyond one day, the small sample size of 11 participants per group, and the inherent inability to blind the practitioner and participants from knowing which treatment was administered or received. As a primary measurement of pain intensity, the authors could have used a 10-cm visual analog scale (VAS), which may have been more sensitive to differences between groups at the one-day follow-up. Also, the addition of a "sham acupressure" group would have helped rule out the possibility of placebo effects or effects stemming from touch, not acupressure per se. Finally, the sample used in this study only included women; men might respond differently to acupressure applied to the points used in this study.

In conclusion, acupressure to both local and distal acupuncture points significantly reduces chronic neck pain in this randomized, controlled trial. The researchers point out that most clinicians combine local and distal acupuncture points in clinical practice, and they suggest that further research should assess combinatorial effects. This Open Access journal article is freely available in PubMedCentral at [www.ncbi.nlm.nih.gov/pmc/articles/PMC2952311/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2952311/).

Author's Note: For additional research about acupressure, please see Robinson et al.'s 2011 Open Access review entitled, "The Evidence for Shiatsu: a systematic review of Shiatsu and acupressure" published in BMC Complementary & Alternative Medicine and available at [www.biomedcentral.com.proxy.library.vcu.edu/1472-6882/11/88](http://www.biomedcentral.com.proxy.library.vcu.edu/1472-6882/11/88).

Reference:

Takako Matsubara, Young-Chang P. Arai, Yukiko Shiro, Kazuhiro Shimo, Makoto Nishihara, Jun Sato, and Takahiro Ushida. "Comparative Effects of Acupressure at Local and Distal Acupuncture Points on Pain Conditions and Autonomic Function in Females with Chronic Neck Pain. Evid Based Complement Alternat Med. 2011; 2011: 543291.

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## Massage Therapy Reduces Hand Pain

*A review of the study "Hand pain is reduced by massage therapy" published in Complementary Therapies in Clinical Practice.*

*Contributed by April Neufeld, BS, LMT; Sandra K. Anderson, BA, LMT, ABT; Karen T. Boulanger, PhD, CMT*

Research on the effects of massage therapy for various conditions is increasing. The Massage Therapy Foundation is invested in reviewing research on how massage therapy affects these conditions, especially those that are musculoskeletal.



As noted in the June article, "Recent Research Provides Evidence of How Massage Therapy Heals" by Jolie Haun, "musculoskeletal problems impact daily function and quality of life, so it is important to validate..." massage therapy treatments. Complementary Therapies in Clinical Practice has published a study conducted at the University of Miami School of Medicine in which Tiffany Field and colleagues examined how massage therapy affects hand pain.

The researchers recruited 46 participants from the medical school who complained of hand pain regardless of the cause, such as arthritis or carpal tunnel syndrome. Most noted that their hand pain was related to computer use. The participants av-

eraged 50 years of age, were of middle socioeconomic status, and were Hispanic, Caucasian and African-American. They were randomly assigned to the massage therapy group or the control group.

The massage therapy group received 15 minutes of hand massage from a massage therapist once a week for four weeks. The hand massage procedure included four techniques: stroking, milking, friction and skin rolling. They were also taught home massage, although this procedure was not described. Both massage and control participants completed assessments before and after their first and last sessions. Assessments included pain (0-10 Visual Analog Scale), grip strength, the State Anxiety Inventory, depression (the Profile of Mood States) and the Sleep Disturbances Scale. The control group received no massage but was given the hand massage instructions after the final assessment.

After four weeks of treatment, Field and colleagues reported that the massage group had decreased pain, increased grip strength, decreased anxiety and decreased depression. The researchers concluded, "These findings are consistent with data on massage therapy with pain syndromes and especially with results from our carpal tunnel syndrome study in which pain was also decreased and grip strength increased by massage therapy. The psychological changes following hand massage in the present study, including the reduction in depressed mood and anxiety are indications of relaxation effects."

This is excellent news for massage therapy practitioners because it helps us understand that patients may feel significant benefits even after treatments as short as 15 minutes in length. Nonetheless, this paper had its limitations, mostly focused on

the lack of detail provided. Field and colleagues reported, "Moderate pressure appears to be critical for these effects," and "Other studies on hand massage also suggest the importance of pressure." However, there are no indications in this study as to if and how pressure was measured. Methods for measuring pressure should have been included or reasons should have been given for not measuring the moderate pressure outlined in the procedures description.

The researchers listed the use of four different techniques: stroking, milking, friction and skin rolling. But in order for a practitioner to duplicate the results in clinical practice, the details of the massage procedure should have included: how many times each technique is repeated, amount of pressure used, duration of each technique and order of technique application. However, Field and colleagues did make a point to describe the hand position of the practitioner and the position of the subject's arm for each technique; this detail is missing from many research studies on massage therapy. Another example of poor procedural description involves the control group. What did the participants in control group do for the 15 minutes between the before and after assessments? We need to be able to evaluate exactly to what massage therapy is being compared.

A third example of needed detail involves the explanation of the procedure of home hand massage that was taught to the participants. The study only states, "They [the participants] were also taught the hand massage." Specificity regarding the method of instruction, including detailed descriptions of the self-massage and recommended duration, are needed to evaluate the internal validity of the study. Additionally, the authors stated, "The participants were asked to keep a record of their massaging themselves daily and were called on a weekly basis to check on their ability to

schedule daily sessions." However, whether the self-massage was performed correctly and consistently was not reported. A future study comparing the effects of massage vs. massage plus home self-massage, would help us to understand any added benefit of having our clients perform self-care.

We agree with the research implication that, "Further research is needed to explore [the] potential mechanisms [of massage therapy]." Studies like these do help support the work that individual massage therapists perform daily with their clients. Practitioners who want more information on the mechanisms of massage therapy and successful treatment methods can go to the list of commonly used PubMed search terms on the Massage Therapy Foundation website.

Reference:

Field T, Diego M, Delgado J, Garcia D, Funk CG. Hand pain is reduced by massage therapy. *Complementary Therapies in Clinical Practice*. 2011; 17: 226-229.

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## Thai Massage Reduces Pain

*A review of the study "Therapeutic effects of traditional Thai massage on pain, muscle tension and anxiety in patients with scapulocostal syndrome: a randomized single-blinded pilot study" published in the Journal of Bodywork and Movement Therapies.*

*Contributed by Derek R. Austin, MS, CMT;  
Sandy Anderson, BA, LMT, ABT; Jolie Haun,  
PhD, LMT.*

Have your clients reported having pain between their shoulder blades? Have your clients ever asked about the effects associated with Thai massage? Do you provide Thai massage as a modality in your practice? If you answered yes to any of these questions, we at the [Massage Therapy Foundation \(MTF\)](#) are reporting on a new study that may be of interest to you.

The study we're reporting provides evidence that Thai massage reduces pain, muscle tension, and anxiety in patients who had myofascial trigger points in the scapular region.

This study from Thailand investigates the effects of traditional Thai massage on scapulocostal syndrome (SCS), a musculoskeletal pain syndrome in the posterior shoulder area. Buttagat and colleagues compared the effectiveness of Thai massage to physical therapy treatments using ultrasound and heat packs in treating pain localized to the medial superior border of the scapula. Previous studies by the

same research team showed that traditional Thai massage promotes relaxation and reduces stress in patients with back pain associated with trigger points.

In this pilot study, the authors recruited patients aged 18-50 years old who had "spontaneous scapular pain which had lasted longer than 12 weeks, and had at least one trigger point in the scapular region." An independent assessor, who was blind to which treatment the patient would receive and had no knowledge or effect on the outcome of the study, examined each patient for associated myofascial trigger points in the serratus posterior superior, rhomboid and levator scapula muscles on the affected side. Trigger points were defined as "the presence of tender points within palpable taut bands of muscle in areas that the patient identified as painful." A total of 20 patients were included in the study because they lacked any other known cause of their pain, nor had any contraindication for Thai massage — e.g. fracture or contagious skin disease.

The 20 participants were randomly assigned into two groups of 10 – a traditional Thai massage group (TTM) or the PT modalities group (PT). The TTM patients "received a 30-min session of TTM for nine sessions over a period of three weeks around the scapula region while lying on their side [in a position of] transverse adduction of their arm, plus protraction of the scapula." The same certified Thai massage therapist performed all nine treatments for each of the ten participants. The PT patients "received a 30-minute session of a hot pack and ultrasound therapy [for 10 min] for nine sessions over a period of three weeks in the same environment as the TTM group."

One common critique of any study investigating pain, especially those involving bodywork therapy, is that pain is inherently subjective. Buttagat and colleagues considered this objection and collected data using five different physiological and psychological outcome measures to assess the participants' experience of pain. Pain and tension were assessed using a horizontal visual analogue scale (VAS). The scale ranged from 0 to 10, with 0 indicating no pain or muscle tension, and 10 indicating the most pain or muscle tension ever experienced. The patients marked the line indicating their levels of pain intensity and muscle tension. Pressure pain threshold (PPT) was assessed using a pressure algometry technique involving participants giving a verbal signal when they began to feel pain or any discomfort (at which point the compression was stopped). State Anxiety Inventory (STAI), Thai version, was measured using a 20 item inventory of how the participant felt at the moment. Characteristic items included "I feel calm" and "I am regretful," and were answered in scale of severity (not at all, a little, somewhat, etc.). Patient satisfaction was determined through a questionnaire consisting of a 5-point scale (not satisfied at all, not satisfied, satisfied, very satisfied, and most satisfied).

All outcome measures were compared at three points – after the first treatment session (immediate effects on day one), one day after the last treatment session (short-term effects at three weeks), and two weeks after the last treatment session (long-term effects at five weeks). Patients were similar at baseline; the TTM group reported pain intensity of 5.2 and muscle tension of 5.5; slightly more compared to the PT group's pain of 4.4 and tension of 4.5.

The pain intensity, muscle tension, and state anxiety all showed significant improvements with treatment among patients in both groups at all time points. How-

ever, there was no change in PPT for the PT group. When comparing each outcome measure individually, the researchers found a significant improvement in the TTM group compared to the PT group, except for the STAI (immediate and long term effect). Just as important, patients were much more satisfied with the TTM therapy – all TTM patients indicated they were "most satisfied" or "very satisfied," compared to the majority of PT patients who reported that they were only "satisfied."

The PPT for the PT modalities group did not change at any point: there was no immediate response, nor was there response after nine sessions. For TTM, however, the pressure needed to elicit pain doubled after nine sessions. Compared to baseline, this was a highly significant change that was also significantly more than the PPT of the PT group at three weeks and at five weeks. Objectively, TTM reduced the pressure sensitivity of these chronically painful areas in only nine half-hour sessions.

While the study size was small, involving only ten people per group, it is highly likely that the effects shown here will be duplicated. Often, a large sample size is necessary to reveal small differences between groups. The differences between TTM and PT modalities were highly significant even with only the twenty participants. The major limitation of this design was that it is impossible to blind the therapists and the patients to the treatments, as is the case in the majority of massage studies. The authors concede that further study should include a "resting condition" or relaxation group where the patients would simply lie on their side for nine sessions of 30-minutes.

Buttagat and colleagues write, "We may therefore conclude that the treatment by TTM among patients with SCS was superior to the PT." However, the two PT modalities used here – heat pack and ultrasound for ten minutes – would likely not be the only treatments that these patients would receive in out-patient physical therapy practice.

If you use Thai massage, you can refer to resources such as this article to support Thai massage as an evidence-based practice. If you want to use Thai massage in your practice, the specific treatment protocols used in this study are included in the research article. However, these protocols are part of traditional Thai massage, which requires knowledge, skill and training for best results to result from this modality. Pursuing continuing education in Thai massage could be worthwhile in order to offer added pain relief benefits to your clients.

#### Reference:

Buttagat V, Eungpinichpong W, Chatchawan U, Arayawichanon P. Therapeutic effects of traditional Thai massage on pain, muscle tension and anxiety in patients with scapulocostal syndrome: a randomized single-blinded pilot study. *J Bodyw Mov Ther.* 2012;16:1:57-63.

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## Massage Therapy Reduces Low Back Pain

*A review of the study "A comparison of the effects of 2 types of massage and usual care on chronic low back pain: a randomized, controlled trial" published in the Annals of Internal Medicine.*

*Contributed by Derek R. Austin, MS, CMT; April Neufeld, BS, LMT, NCTMB; Jolie Haun, PhD, LMT.*

Non-specific low back pain is one of the most common muscular-skeletal issues reported by patients/clients seeking pain relief. Massage therapy is recognized in clinical practice as an effective treatment.



However, the [Massage Therapy Foundation](#) is always looking for scientific evidence to support clinical recommendations. This month's review illustrates study findings supporting the use of massage therapy to manage chronic low back pain.

A controlled trial was recently published in the [Annals of Internal Medicine](#). Dr. Daniel C. Cherkin and his colleagues at the [Group Health Research Institute](#) in Seattle, compared massage plus usual care to usual care alone in their study of participants, ages 20 to 65 years old (n=401). Study findings, "suggest that both relaxation massage and structural massage are reasonable treatment options for per-

sons with chronic low back pain." Participants in the study received 10 weekly treatments at no cost, which consisted of either relaxation massage or structural massage, randomly assigned. Twenty-seven licensed massage practitioners, all of whom had a minimum of five years experience, received 1.5 days of protocol training and provided massage treatments. The LMPs knew which type of massage they were performing, which they did not disclose with participants. Additionally, participants were provided kinesthetic exercises to do in the home setting to help relieve their back pain between treatments.

Study findings suggest, "massage therapy improved function and decreased pain more than usual care in patients with uncomplicated chronic lower back pain [LBP] after 10 weeks." The participants who received massage in addition to usual care reported significantly lower Roland Disability Quotient scores ( $p < 0.001$ ) and symptom bothersomeness scores ( $p < 0.001$ ). The beneficial effects of massage lasted at twenty-six weeks ( $p = 0.007$ ) and fifty-two weeks ( $p = 0.049$ ) when measured by the Roland Disability Quotient. Symptom bothersomeness was only significantly reduced at the end of the ten-week trial. The authors note that "massage recipients were more likely than participants in the usual care group to experience clinically meaningful reductions" in functional limitations and low back pain symptoms.

Massage reduced self-reported medication use for LBP ( $p = 0.006$ ), including specifically NSAID use for LBP ( $p = 0.027$ ) at the end of the ten-week trial. However, the reduction in medication use did not persist by twenty-six weeks. Similarly, massage patients were able to decrease absenteeism to work or school caused by their LBP ( $p = 0.018$ ) at the ten-week mark, although these effects did not last either. Patients in the massage group were significantly more likely to be "pleased or delighted if

LBP remained at the current level for the rest of life" at the end of the ten-week trial ( $p=0.007$ ) than patients receiving usual care. In addition, massage patients were significantly more likely ( $p<0.001$ ) to be "very satisfied with [their] LBP care" at ten weeks, twenty-six weeks and fifty-two weeks.

While some massage therapists are more skilled than others, the authors "found no evidence of differential effectiveness among the massage therapists." For the consumer, this implies that local massage therapists are a great choice for managing lower back pain. Also, the authors examined both relaxation and structural massage, but they "could not detect a clinically meaningful difference between the two types" of massage. This implies that structural massage - also known as neuromuscular and myofascial massage - may not be any more effective than relaxation massage at relieving nonspecific lower back pain. This is an exciting issue for future research to address.

A limitation to this study was that participants receiving only usual care were told that they were enrolling in a trial of massage therapy and received no massage therapy. In other words, they were not blinded to being in the control group. Also, these results may not be generalizable beyond the mostly-female group of mostly white individuals with nonspecific chronic low back pain. Persons with known causes of back pain, including disk herniation, were completely excluded from the study. Persons with these back issues represent a specific population and need, which may also be addressed in future research to expand on the findings of this study.

The researchers report that at this point, there's little evidence of which mechanisms explain the beneficial effects of massage. Mechanisms may be explained by

therapeutic touch, relaxing environment, therapist care, increased body awareness, self-care advice, a generalized central nervous system response, local stimulation of tissue or a combination of these influencing factors. What can be clearly stated is this research provides evidence to support the therapeutic benefits of massage for managing chronic low back pain.

So what does this study contribute to the field of massage therapy? This study provides the evidence to support the clinical decision to use massage therapy to manage clients'/patients' chronic low back pain. Further, different types of massage therapy can be equally effective whether relaxation, neuromuscular and/or myofascial. Finally, because multiple therapists provided treatments, and no differences were found between therapists, findings indicate specialized skill is not necessary to provide clients/patients with effective treatments to manage symptoms of low back pain. Further, the authors of this study provide massage protocols for applying massage for low back pain, so these study results can be replicated in practice. Want to incorporate these proven techniques into your massage practice? The exact study protocols are available free online at [www.trialsjournal.com/content/10/1/96](http://www.trialsjournal.com/content/10/1/96).

Reference:

Cherkin DC, Sherman KJ, Kahn J, Wellman R, Cook AJ, Johnson E, Erro J, Delaney K, Deyo RA. A comparison of the effects of 2 types of massage and usual care on chronic low back pain: a randomized, controlled trial. *Ann Intern Med*. 2011;155:1:1-9, [www.ncbi.nlm.nih.gov/pubmed/21727288](http://www.ncbi.nlm.nih.gov/pubmed/21727288).

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# Patients with Fibromyalgia Find Comfort in Massage Myofascial Release Therapy

*A review of the study "Benefits of Massage-Myofascial Release Therapy on Pain, Anxiety, Quality of Sleep, Depression, and Quality of Life in Patients with Fibromyalgia" published in Evidence-Based Complementary and Alternative Medicine.*

*Contributed by Jolie Haun, PhD, LMT; Derek R. Austin, MS, CMT; Karen T. Boulanger, PhD, CMT.*

A recent article published in the journal, *Evidence-Based Complementary and Alternative Medicine*, described the "[Benefits of Massage-Myofascial Release Therapy on Pain, Anxiety, Quality of Sleep, Depression, and Quality of Life in Patients with Fibromyalgia.](#)"

This article, authored by Castro-Sanchez and colleagues, defined fibromyalgia as "a chronic syndrome characterized by generalized pain, joint rigidity and intense fatigue. Other frequently associated symptoms are sleep alterations, headache, spastic colon, anxiety and depression." The authors suggest fibromyalgia often leaves patients feeling incapable of performing basic daily life activities, even resulting in painful symptoms and conditions such as, "myofascial trigger points, degenerative joint disease, inflammatory joint disease, bursitis, tendinitis, development alterations, hypermobility syndrome, neuropathic pain, injuries, traumas, repeated muscle pulls, visceral pain, disk herniation, spinal stenosis and recurrent cephalalgia (headaches)."

To date, there is no known cure for fibromyalgia, thus treatment is focused on symptom control. Myofascial release therapy is commonly used to treat the symptoms of fibromyalgia. Myofascial release therapy, a soft tissue therapy, uses palpatory feedback to release myofascial tissue (the fascia that surrounds and separates layers of muscle). This accomplishes increased circulation, lymphatic drainage and relaxation of contracted muscles by stimulating the stretch reflex of muscles and overlying fascia. The purpose of this study was to "determine the benefits of massage-myofascial release therapy on pain, anxiety, quality of sleep, depression, and quality of life in patients with fibromyalgia".

Castro-Sanchez and colleagues conducted a two-group (i.e., treatment and control) randomized controlled trial to determine the benefits of massage-myofascial release therapy in patients with fibromyalgia. Of the 64 fibromyalgia patients recruited, 59 participants completed the study; 30 in the treatment group and 29 in the control group. The treatment group received a 90-minute massage-myofascial release therapy session, weekly for 20 weeks. The treatment consisted of "massage-myofascial release at insertion of the temporal muscle, release of falx cerebri by frontal lift, release of tentorium cerebelli by synchronization of temporals, assisted release of cervical fascia, release of anterior thoracic wall, release of pectoral region, lumbosacral decompression, release of gluteal fascia, transversal sliding of wrist flexors and fingers and release of quadriceps fascia." The control group received a weekly 30-minute session of disconnected magnetotherapy for 20 weeks. Patients in the control group were unaware they were receiving a sham treatment.

Pain, anxiety, quality of sleep, depression, and quality of life were measured at baseline, after the last treatment session, and at one and six months after finishing

treatment. Changes in scores for anxiety, pain, depression and quality of life were analyzed for group differences between the treatment and control group. After the twenty weeks of treatment, and when measured again one month post-treatment, anxiety levels, quality of sleep, pain and quality of life were significantly improved in the treatment group over the control group. At six months post intervention, there were only significant improvement in the quality of sleep measure.

Castro-Sanchez and colleagues demonstrated the effects of a 20-week massage-myofascial release treatment program for fibromyalgia patients, with significant improvements in pain, anxiety, quality of sleep and quality of life. Findings indicate the treatment reduced sensitivity to pain, particularly at the lower cervicals, gluteal muscles and near the greater trochanters. In this study the treatment resulted in no changes in depression scores.

Though this was a robust and rigorous study, the authors reported study limitations which should be considered when interpreting findings. First, the exclusion of eligible participants due to incompatibility of schedules may impact sample characteristics. Second, patients with less severe pain may have been able to improve more rapidly. Third, a longitudinal component with more than a six month follow up may be necessary for a more comprehensive analysis to examine the relationship between pain and depression in patients with fibromyalgia.

Despite study limitations, these findings provide important implications for this evidence-based practice. These findings suggest massage-myofascial therapy can be considered as an alternative and complementary therapy to achieve symptom improvement in patients with fibromyalgia. When marketing this treatment modality

for consumers, practitioners can provide patients evidence of the benefits of massage-myofascial therapy in reducing pain, anxiety and improving quality of sleep and quality of life.

Castro-Sanchez and colleagues provide compelling data that in the case of fibromyalgia, where symptom control is the only current option, this evidence suggests patients can find comfort in massage-myofascial therapy.

Reference:

Castro-Sanchez A M, Mataran-Penarrocha G A, Granero-Molina J, Aguilera-Manrique G, Quesada-Rubio J M, Moreno-Lorenzo C. Benefits of Massage-Myofascial Release Therapy on Pain, Anxiety, Quality of Sleep, Depression, and Quality of Life in Patients with Fibromyalgia. Evidence-Based Complementary and Alternative Medicine. 2011. doi:10.1155/2011/561753

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## About The Massage Therapy Foundation

The Massage Therapy Foundation was founded by AMTA in 1990 with the mission of bringing the benefits of massage therapy to the broadest spectrum of society through the generation, dissemination, and application of knowledge in this field. We do this by receiving donations and granting funds for research, community service, educational initiatives, and conferences. We also do this by providing direct consultation to the medical and research communities, and by educating massage therapists about the world of research.

Learn more about the Massage Therapy Foundation at [www.massagetherapyfoundation.org](http://www.massagetherapyfoundation.org).