

Manual Medicine and Chronic Pain: An Integrative Approach **Karen Erickson, D.C.**

Chronic pain is often best managed by an integrated combination of therapies which might include manual therapies like chiropractic, craniosacral therapy, and massage, as well as supplements, medication, mental health support. More than two-thirds of patients with chronic pain use alternative and complementary therapies including manual therapies, (1). Pain associated with an illness or injury often has a natural history of resolving. Pain that does not resolve as expected and lasts for more than 3 months, and ranging from mild to severe in nature is considered ***chronic pain***.

Discovering the root cause of chronic pain can sometimes be the most difficult challenge. Differential diagnosis is essential. Occasionally, serious disease is ruled out, and the root cause of pain is not found. Early treatment of chronic pain may be more effective, and prevent pain from getting worse. Some studies suggest that chronic pain is not always well managed by pharmacological methods and an integrated approach should be considered. Medications may reduce pain for hours, whereas manual medicine techniques may give relief for days, (2). Ironically, even though chronic pain is a chronic disorder, many of the studies lack long term follow-up of patients, (3).

The quality of pain can include discomfort, soreness, stiffness, aching, burning, shooting or electrical sensations. It can be merely annoying or so severe that the patient's normal life is completely disrupted. Chronic pain can cause emotional stress including anxiety, fear, fatigue, insomnia and depression. Manual therapies can be helpful in managing mild depression which results from or exaggerates chronic pain. Chronic pain can occur at any age, but is more common in older patients. However, it is important to stress that pain is not a normal part of aging.

Patients experiencing chronic pain should consider incorporating manual therapies including massage, chiropractic and craniosacral therapy into an integrative treatment approach. Manual therapies can be a vital intervention in the treatment and management of low back pain, neck pain, arthritis and headaches, as well as end of life care. Additionally, hands on treatments tend to increase the release of natural anti-pain substances in your body called endorphins, reduce inflammation, and improve blood and lymphatic circulation, which can contribute to reduction of pain, (4). Manual therapies also are known to reduce stress hormone levels, which enable patients to cope with pain better, (5). Over time, manual therapy treatments may increase your ability to physically and emotionally function, which will enable you to be more proactive in managing your pain and improving quality of life.

Massage Therapy and Chronic Pain

Massage therapy is a readily available healing art that should be incorporated into an integrative approach to chronic pain. Massage therapy includes a variety of hands on therapies that can be done in the home by family and friends, as well as by professionally trained and licensed massage therapists. Even a simple gesture of holding someone's hand has therapeutic value. Massage therapy includes a range of techniques from "light and relaxing" massage that improves circulation like Swedish massage, to firmer techniques including Rolfing, shiatsu, foot reflexology, acupressure, and sports massage. Finally, other techniques that fall into the category

of massage therapy are extremely light in touch and include Reiki and energy healing techniques.

Massage Therapy for Musculoskeletal Pain:

Massage has been shown effective for persistent sub acute and chronic back pain, (6), (7). In particular, reduction of diffuse, chronic musculoskeletal pain was reduced by massage therapy during the active treatment period, but 3 months after massage was discontinued, the pain returned. The authors suggest that longer sessions of 30-60 minutes over a longer period of time seem to be most effective, (8). But in other studies, massage therapy was shown to more effectively manage chronic pain than standard medical care, even after a follow-up period or 1 year (9), (10), (11). Acupressure was more effective than physical therapy in treating low back pain, (12). Many studies have suggested that combining exercise with massage therapy can have a synergistic effect on reducing musculoskeletal pain, (13). However, there is a need for more standard treatment protocols in all manual therapy research. All the studies agree that massage therapy for musculoskeletal pain is safe, reduces pain and dysfunction and has high patient satisfaction.

Massage therapy done in long, slow strokes on the back of patients suffering stroke was effective for reducing shoulder pain and anxiety, (14). Reflexology or massage of reflex points in the feet can be a worthwhile treatment to explore for chronic pain. It has the advantages of not necessitating the patient to undress and can be easily done in hospital and home settings by trained therapists or other caregivers, (15).

Massage Therapy and the stress of chronic pain:

Mindfulness training was more effective in reducing stress of musculoskeletal pain, whereas massage actually was more effective in reducing the level of pain, (16). Massage therapy seems to decrease pain in part by causing up to a 30% decrease in cortisol (stress hormone) levels and an almost 30% increase in serotonin and dopamine levels (activating neurotransmitters), (17). Massage therapy at two 30 min sessions per week for 5 weeks showed improved range of motion, improved sleep, higher dopamine and serotonin levels, and less pain, anxiety and depression even after a 6 month follow-up. These changes were not seen by the group receiving progressive muscle relaxation, (18). Massage therapy has been shown to have a positive effect of depression and somatic symptoms in chronic fatigue syndrome, (19).

Manual Therapy and Jaw and Face Pain

There is convincing evident that manual therapies including chiropractic, massage therapy and cranial sacral therapy can have a very positive effect on TMD Syndrome, or jaw and face pain. Massage and physical therapy techniques utilized by chiropractors and craniosacral therapists show a 60% decrease in myofascial pain of the masticatory system (jaw and face pain associated with chewing), (20). Using manual therapies can be a vital part of an integrative approach to face and jaw pain, reducing the reliance on pain medication.

Massage Therapy and Craniosacral Therapy for Cancer and End of Life Care:

Several studies have demonstrated that massage therapy is helping in reducing the chronic pain of cancer. In particular they reported improved quality of life with less nausea, anxiety, procedural pain, (21), (22). Massage therapy appears to reduce the need for analgesics, and improved quality of life by reducing pain, anxiety and emotional distress in Hospice or at end of life, (23), (24).

Chiropractic and Chronic Pain

Chiropractic should be considered when designing an integrative approach to chronic pain. There are many different chiropractic techniques that are effective. Patients should explore which chiropractic techniques are appropriate to include in their treatment plan. Chiropractic care has long been known to have a positive effect on musculoskeletal pain, including low back pain, neck pain and headaches. Medical approaches to chronic pain tend to be heavily focused on the use of prescription medication, which can be a physiological burden for many patients. Patients should explore non-pharmalogical approaches to chronic pain. Having a safe effective method to reduce back pain, neck pain and headaches can be a powerful addition to an integrative approach to chronic pain.

Chiropractic is widely recognized as one of the safest non-invasive, drug-free therapies available for the treatment of back pain, neck pain, headaches and other neuromusculoskeletal complaints. The mechanism of action for chiropractic's effectiveness appear to include improving joint function mechanically, restoring soft tissue function, as well as triggering a positive cascade of biochemical effects that help reduce pain and inflammation in acute as well as chronic pain syndromes. In addition, a significant amount of evidence shows that the use of chiropractic care for certain conditions can be more effective and less costly than traditional medical care.

Chiropractic and Low Back Pain

Chiropractic care has been shown to be effective for acute and chronic low back pain. When treated with 12 weeks of care, patients who were under chiropractic care showed profound and lasting improvements as opposed to patients who are receiving standard medical care. The positive effects on pain and disability did not decay after chiropractic care was discontinued, (25). Another study confirmed that chiropractic and medical care have comparable costs for treating chronic low back pain, with chiropractic producing significantly better outcomes, (26). Manual manipulation provides better short-term relief of chronic spinal pain than does a variety of medications, according to another recent study (27). In 4 systemic reviews, there is promising evidence that chiropractic and massage can be helpful for chronic pain as part of an integrative treatment approach, (28). In another review of 9 studies, spinal manipulation was found to be superior to massage in treating chronic low back pain, (29).

Chiropractic for Neck Pain and Headaches

There is good evidence that chiropractic is safe and effective in treating neck pain, especially in an integrative context. Risk of increased symptoms from treatment is low at 1-2%, with the most common being dizziness. The risk of serious complication

is extremely low at 0.0001%, (30). There is strong evidence that chiropractic is the most effective manual medicine treatment for all types of headaches, particularly tension headaches (31), (32).

One of the promising areas of research on chiropractic is how chiropractic reduces pain and inflammation. A brand new study has shown that one of the mechanisms by which chiropractic manipulation of joints reduces pain is by reducing inflammatory cytokines, (33). Chiropractic also has the effect of reducing cortisol levels which is the "stress hormone." Chiropractic also has the effect of reducing blood pressure temporarily.

Craniosacral Therapy and Chronic Pain

Craniosacral therapy, derived from osteopathic and chiropractic traditions, is a gentle hands-on technique that works to ease tension in the connective tissue around the brain, spinal cord, joints and organs. This can help modulate neurological function, particularly the balance between the sympathetic and parasympathetic parts of the autonomic nervous system, which assists in the regulation of stress and pain perception, organ function, digestion, blood sugar regulation, blood pressure, lymphatic flow, (34). It is a full body technique that is usually done with the patient clothed and lying face up. Most patients report that craniosacral sessions are profoundly relaxing. Research shows that in addition to relaxing the muscles and joints, craniosacral therapy reduces stress by lowering the "stress hormone" or cortisol levels associated with the "flight or fight" part of the nervous system.

There is not a great deal of research published in peer review journals on cranial sacral therapy and chronic pain, (35). One study showed a cranial sacral therapy technique called CV4 effective for headaches, (36). There is ample anecdotal evidence that this gentle therapy has helped thousands of patients with other kinds of pain syndromes. It is commonly used as part of an integrative approach to chronic pain. There are unpublished case studies of cranial sacral therapy being helpful for patients with chronic low back and neck pain including spinal stenosis and disc herniations, headaches, jaw and face pain, post-traumatic stress syndrome, post-stroke syndromes, and regional pain syndromes.

Take Away Points

1. Your best source of finding a qualified and experienced chiropractor or massage therapist is through a personal recommendation from your doctor, a friend or a colleague. You can also contact the American Chiropractic Association (<http://www.amerchiro.org>, (703) 276-8800) or the American Massage Therapy Association (<http://www.amtamassage.org>, (877) 905-2700) to locate a practitioner near you.

2. Self-massage techniques and basic reflexology can be helpful and easy to learn. These websites provide good instruction and information on the value and techniques of self-massage.

<http://www.nwhealth.edu/healthy/chillout/self.html>

<http://www.full-body-massage-online.com/selfmassage.html>

http://www.holistic-online.com/massage/mas_home.htm

<http://www.mynaturalharmony.com/massage.htm>

3. Trade massage with a spouse or friend. You can start with shoulder, feet, scalp or hand massages. You can do this!

4. The Upledger Institute is an excellent resource to learn more about craniosacral therapy and to locate craniosacral therapists around the country and world.

<http://www.upledger.com/home.htm>, (561) 622-4334

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