Osteopathic Manipulative Treatment

En Español (Spanish Version)

Overview | History of Osteopathic Manipulative Treatment | Forms of Osteopathic Manipulative Treatment | What is Osteopathic Manipulative Treatment Used For? | What is the Scientific Evidence for Osteopathic Manipulative Treatment? | Finding a Qualified Practitioner of Osteopathic Manipulative Treatment | Safety of Osteopathic Manipulative Treatment | References

Alternate Names
• Cranial Osteopathy; Cranial-sacral Therapy; Doctor of Osteopathy (D.O.); Muscle Energy Technique; Jones Counterstrain; Mobilization; Myofascial Release; OM; OMT; Osteopathic Manipulation; Osteopathic Medicine; Osteopathy; Strain-counterstrain

Principle Proposed Uses
• Back Pain; Enhancing Recovery from Surgery or Serious Illness; Fibromyalgia; General Health; Musculoskeletal Pain; Neck Pain

Other Studied Uses
• Asthma; General Health; Numerous Others; Osteoarthritis; Sinus Infections; Tendonitis

Overview
Osteopathy originated as a 19th century alternative medical approach emphasizing the physical manipulation of the neuromusculoskeletal system. Today, osteopathic physicians study and practice the same types of medical and surgical techniques as their conventional MD colleagues with the addition of osteopathic manipulative treatment (OMT) as an adjunct procedure.

History of Osteopathic Manipulative Treatment
Osteopathic medicine was founded in 1874 by Andrew Taylor Still, a US physician. Physicians educated in this method were called doctors of osteopathy, or DOs. Subsequently, however, schools of osteopathic medicine incorporated much of the same curriculum taught in conventional medical schools, while uniquely preserving training in OMT. And today, the license of DO is legally equivalent to that of MD. Like MDs, DOs complete 4 years of medical education followed by 3-8 years of graduate medical education.

Forms of Osteopathic Manipulative Treatment
Osteopathic and chiropractic techniques overlap, but they are not identical. As a general rule, chiropractors focus most of their attention on the spine, while osteopathic practitioners devote their efforts throughout the musculoskeletal system, including soft tissues and joints outside the spine.

There are several specific osteopathic techniques in wide use. Some of the more popular include:

• High velocity, low amplitude (HVLA) technique
Muscle energy technique
Strain-counterstrain technique
Myofascial release technique
Osteopathy in the cranial field

High Velocity/Low Amplitude Technique (HVLA)

HVLA is used to release restrictions in the movement by applying a rapid, therapeutic force of brief duration that travels a short distance within the anatomic range of motion of a joint. It is also known as “thrust technique.”

Muscle Energy Technique

In muscle energy technique, the patient voluntarily moves a body part from a precisely controlled position against a defined resistance by the osteopathic physician. The purpose is to progressively improve mobility of a joint.

Strain-counterstrain Technique (Jones Counterstrain)

Strain-counterstrain technique (Jones counterstrain) involves finding tender points and then passively manipulating associated joints until the tenderness decreases. Like muscle-energy work, strain-counterstrain progressively increases range of motion and, it is hoped, decreases muscle spasm and pain.

Myofascial Release

Myofascial release focuses on the fascial tissues that surround muscles. The practitioner palpates the fascial tissues, looking for a subtle sensation that indicates the tissues are ready to “unwind,” and then helps the tissue to follow a pattern of spontaneous movement. This process is repeated over several sessions until a full release is achieved.

Osteopathy in the Cranial Field

Osteopathy in the cranial field (sometime called cranial-sacral therapy) is a specialized technique based on the belief that the tissues surrounding the brain and spinal cord undergo a rhythmic pulsation. This “cranial rhythm” is supposed to cause subtle movements of the bones of the skull. A practitioner of cranial-sacral therapy is able to detect these rhythms and gently manipulate the bones in time with it. The existence of such cranial rhythms is controversial.

What Is Osteopathic Manipulative Treatment Used For?

At the discretion of the DO, OMT is used as a key component of the management plan in conjunction with medications, surgery, education, and lifestyle counseling. OMT is primarily used to treat musculoskeletal pain conditions, such as back pain, shoulder pain, arthritis, and tension headaches. Some advocates of OMT believe that it has numerous other benefits, including:

- Upper respiratory infections
- Fibromyalgia
- Asthma
- Carpal tunnel syndrome
- Pneumonia
- Bronchitis
- Overall health and well-being
What Is the Scientific Evidence for Osteopathic Manipulative Treatment?

There is little evidence as yet that OMT is helpful for the treatment of any medical condition. There are several possible reasons for this, but one is fundamental: Even with the best of intentions, it is difficult to properly ascertain the effectiveness of a hands-on therapy like OMT.

Only one form of study can truly prove that a treatment is effective—the double-blind, placebo-controlled trial. (For more information on why such studies are so crucial, see Why Does This Database Rely on Double-blind Studies?) However, it isn’t possible to fit OMT into a study design of this type. What could researchers use as a placebo OMT? And how could they make sure that both participants and practitioners would be kept in the dark regarding who is receiving real OMT and who is receiving fake OMT? The fact is, they can’t.

Because of these problems, all studies of OMT fall short of optimum design. Many have compared OMT against no treatment. However, studies of that type cannot provide reliable evidence about the efficacy of a treatment: If a benefit is seen, there is no way to determine whether it was a result of OMT specifically or just attention generally. (Attention alone will almost always produce some reported benefit.)

More meaningful trials used fake osteopathy for the control group. Such studies are single-blind because the practitioner is aware of applying phony treatment. However, this design can introduce potential bias in the form of subtle unconscious communication between practitioner and patient.

Still other studies have simply involved giving people OMT and seeing if they improve. These trials are particularly meaningless; it has long since been proven that both participants and examining physicians will think, at least, that they observe improvement in people given a treatment, whether or not the treatment does anything on its own; such studies are not reported here.

Given these caveats, the following is a summary of what science knows about the effects of OMT.

Possible Effects of Osteopathic Manipulative Treatment

Most studies of OMT have involved its potential use for various pain conditions.

Neck Pain

In a study of 183 people with neck pain, use of osteopathic methods provided greater benefits than standard physical therapy or general medical care. Participants receiving OMT showed faster recovery and experienced fewer days off work. OMT appeared to be less expensive overall than the other two approaches; however, researchers strictly limited the allowed OMT sessions, making direct cost comparisons questionable. Another study evaluated a rather ambitious combined therapy for the treatment of chronic pain resulting from whiplash injury (craniosacral therapy along with Rosen Bodywork and Gestalt psychotherapy). The results failed to find this assembly of treatments more effective than no treatment.

Shoulder Pain

In a 14-week, single-blind study of 29 elderly people with shoulder pain, real OMT proved more effective than placebo OMT. Although participants in both groups improved, those in the treated group showed relatively greater increase in range of motion in the shoulder. And, in a larger study of 150 adults with shoulder complaints, researchers found that adding manipulative therapy to usual care improved shoulder and neck pain at 12 weeks.

Tendonitis

In a small randomized, placebo-controlled trial researchers used oscillating-energy manual therapy, an osteopathic technique based on the principle of craniosacral therapy, to treat 23 subjects with chronic tendonitis of the elbow (tennis elbow or lateral epicondylitis). Subjects in the treatment group showed significant improvement in grip strength, pain intensity, function, and activity limitation due to pain. These results however,
are limited by the small size of the study and the fact that the therapist delivering the treatment could not be blinded.\textsuperscript{17}

Fibromyalgia

Twenty-four women with fibromyalgia were divided into five groups: standard care, standard care plus OMT, standard care plus an educational approach, standard care plus moist heat, and standard care plus moist heat and OMT.\textsuperscript{2} The results indicate that OMT plus standard care is better than standard care alone, and that OMT is more effective than less specific treatments, such as moist heat or general education. However, because this was not a blinded study (participants knew which group they were in), the results can’t be taken as reliable. In another study, 93 women (average age 53) with fibromyalgia were randomized to receive sham treatment or craniosacral therapy (one-hour sessions twice a week for 20 weeks).\textsuperscript{13} The women in the craniosacral therapy group experienced a decrease in pain at 20 weeks, which persisted for at least one year.

Tension Headaches

A study of 28 people with tension headaches compared one session of OMT against two forms of sham treatment and found evidence that real treatment provided a greater improvement in headache pain.\textsuperscript{2}

Back Pain

Although OMT has shown some promise for the treatment of back pain,\textsuperscript{4,5} one of the best-designed trials failed to find it a superior alternative to conventional medical care. In this 12-week study of 178 people, OMT proved no more effective than standard treatment for back pain.\textsuperscript{5} Another study, this one enrolling 199 people and following them for 6 months, failed to find OMT more effective than fake OMT.\textsuperscript{14} This study also included a no-treatment group; both real and fake OMT were more effective than no treatment.

A much smaller study reportedly found that muscle energy technique enhances recovery from back pain, but this study does not appear to have used a meaningful placebo treatment.\textsuperscript{15}

Osteoarthritis

Researchers analyzed 4 studies investigating the benefits of manual therapy (including massage therapy, joint mobilization, and manipulation) for osteoarthritis of the hip or knee.\textsuperscript{20} The results were inconclusive. Although one of the studies (involving 68 people) did find that massage therapy helped to improve pain and function, it was compared to no intervention rather than another treatment or a placebo.

Surgery

Some studies have evaluated the potential benefits of OMT for speeding healing in people recovering from surgery or serious illness. The best of these studies compared OMT against light touch in 58 elderly people hospitalized for pneumonia.\textsuperscript{2} The results indicate that use of osteopathy aided recovery.

In a much less meaningful study, OMT was compared to no treatment in people recovering from knee or hip surgery.\textsuperscript{8} While the people receiving OMT recovered more quickly, these results mean very little, since, as noted above, any form of attention should be expected to produce greater apparent benefits than no attention.

Other Conditions

A weak study suggests that OMT might also be helpful for people hospitalized with pancreatitis.\textsuperscript{9}

A small study found some evidence that OMT might be helpful for childhood asthma.\textsuperscript{16}

Finding a Qualified Practitioner of Osteopathic Manipulative Treatment
At the current rate of growth, it is estimated that more than 100,000 DOs will be in active medical practice by the year 2020. Many DOs who use OMT have been certified by the American Osteopathic Board of Neuromusculoskeletal Medicine. Osteopathic family physicians are the highest utilizers of OMT. People can find a DO by searching online at sites like the American Osteopathic Association or the American Academy of Osteopathy.

Safety of Osteopathic Manipulative Treatment

Most forms of OMT, because of their gentle nature, are believed to be quite safe. However, mild short-term, self-limited discomfort may occur immediately following treatment. Rarely has there been a report of serious injury as a result of OMT.

References


