

## Massage Therapy as CAM

Massage therapy is a practice that dates back thousands of years. There are many types of massage therapy; all involve manipulating the muscles and other soft tissues of the body. In the United States, massage therapy is sometimes part of conventional medicine.\* In other instances, it is part of complementary and alternative medicine (CAM).† This Backgrounder provides a general overview of massage therapy used as CAM and suggests some resources you can use to learn more.

### Key Points

- People use massage therapy as CAM for a variety of health-related purposes, from treating specific diseases and conditions to general wellness.
- Scientists do not fully know what changes occur in the body during massage, whether they influence health, and, if so, how. The National Center for Complementary and Alternative Medicine (NCCAM) is sponsoring studies to answer these questions and identify the purposes for which massage may be most helpful.
- There appear to be few risks to massage therapy if it is used appropriately and provided by a trained massage professional.
- Tell your health care providers about any CAM therapy you are considering or using, including massage therapy. This helps to ensure safe and coordinated care.

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\* Conventional medicine is medicine as practiced by holders of M.D. (medical doctor) and D.O. (doctor of osteopathy) degrees and by their allied health professionals, such as physical therapists, psychologists, and registered nurses. An example of massage therapy as conventional medicine is using it to reduce a type of swelling called lymphedema.

† CAM is a group of diverse medical and health care systems, practices, and products that are not presently considered to be part of conventional medicine. While some scientific evidence exists regarding some CAM therapies, for most there are key questions that are yet to be answered through well-designed scientific studies. An example of massage therapy as CAM is using it with the intent to enhance immune system functioning.

## What Massage Therapy Is

The term massage therapy (also called massage, for short; massage also refers to an individual treatment session) covers a group of practices and techniques. There are over 80 types of massage therapy. In all of them, therapists press, rub, and otherwise manipulate the muscles and other soft tissues of the body, often varying pressure and movement. They most often use their hands and fingers, but may use their forearms, elbows, or feet. Typically, the intent is to relax the soft tissues, increase delivery of blood and oxygen to the massaged areas, warm them, and decrease pain.

A few popular examples of this therapy are as follows:

- In **Swedish massage**, the therapist uses long strokes, kneading, and friction on the muscles and moves the joints to aid flexibility.
- A therapist giving a **deep tissue massage** uses patterns of strokes and deep finger pressure on parts of the body where muscles are tight or knotted, focusing on layers of muscle deep under the skin.
- In **trigger point massage** (also called pressure point massage), the therapist uses a variety of strokes but applies deeper, more focused pressure on myofascial trigger points—“knots” that can form in the muscles, are painful when pressed, and cause symptoms elsewhere in the body as well.
- In **shiatsu massage**, the therapist applies varying, rhythmic pressure from the fingers on parts of the body that are believed to be important for the flow of a vital energy called qi.

Massage therapy (and, in general, the laying on of hands for health purposes) dates back thousands of years. References to massage have been found in ancient writings from many cultures, including those of Ancient Greece, Ancient Rome, Japan, China, Egypt, and the Indian subcontinent.

In the United States, massage therapy first became popular and was promoted for a variety of health purposes starting in the mid-1800s. In the 1930s and 1940s, however, massage fell out of favor, mostly because of scientific and technological advances in medical treatments. Interest in massage revived in the 1970s, especially among athletes.

More recently, a 2002 national survey on Americans’ use of CAM (published in 2004) found that 5 percent of the 31,000 participants had used massage therapy in the preceding 12 months, and 9.3 percent had ever used it. According to recent reviews, people use massage for a wide variety of health-related intents: for example, to relieve pain (often from musculoskeletal conditions, but from other conditions as well); rehabilitate sports injuries; reduce stress; increase relaxation; address feelings of anxiety and depression; and aid general wellness.

## Who Provides Massage Therapy

A person who professionally provides massage therapy is most often called a massage therapist, although there are some other health care providers (such as chiropractors) who also

have massage training. This Backgrounder mainly uses the term massage therapist. Most massage therapists learn and practice more than one type of massage.

To learn massage, most therapists attend a school or training program, with a much smaller number training instead with an experienced practitioner. Many students are already licensed as another type of health care provider, such as a nurse.

There are about 1,300 massage therapy schools, college programs, and training programs in the United States. The course of study typically covers subjects such as anatomy and physiology (structure and function of the body); kinesiology (motion and body mechanics); therapeutic evaluation; massage techniques; first aid; business, ethical, and legal issues; and hands-on practice of techniques. These educational programs vary in many respects, such as length, quality, and whether they are accredited. Many require 500 hours of training, which is the same number of hours that many states require for certification. Some therapists also pursue specialty or advanced training.

At the end of 2004, 33 states and the District of Columbia had passed laws regulating massage therapy—for example, requiring that massage therapists graduate from an approved school or training program and pass the national certification exam in their field in order to practice. Cities and counties may have laws that apply as well. Professional organizations of massage therapists have not agreed upon the standards for recognizing that a massage therapist is properly and adequately trained.

### **Licenses and Certifications**

Some common licenses or certifications for massage therapists include:

- LMT Licensed Massage Therapist
- LMP Licensed Massage Practitioner
- CMT Certified Massage Therapist
- NCTMB Has met the credentialing requirements (including passing an exam) of the National Certification Board for Therapeutic Massage and Bodywork, for practicing therapeutic massage and bodywork
- NCTM Has met the credentialing requirements (including passing an exam) of the National Certification Board for Therapeutic Massage and Bodywork, for practicing therapeutic massage

### **What Massage Therapists Do in Treating Patients**

Massage therapists work in a variety of settings, including private offices, hospitals, other clinical settings, nursing homes, studios, and sport and fitness facilities. Some also travel to patients' homes or workplaces to provide a massage.

Massage therapy treatments usually last for 30 to 60 minutes; less often, they are as short as 15 minutes or as long as 1.5 to 2 hours. For some conditions (especially chronic ones), therapists

often advise a series of appointments. Therapists usually try to provide an environment that is as calm and soothing as possible (for example, by using dim lighting, soft music, and fragrances).

At the first appointment, a massage therapist will discuss your symptoms, medical history, the results you (and your health care provider, if applicable) desire, and possibly other factors such as your work and levels of stress. She will likely perform some evaluations through touch. If she finds nothing that would make a massage inadvisable, she will proceed with the massage. At any time, you can bring up questions or concerns.

During treatment, you will lie on a special padded table or sit on a stool or chair. You might be fully clothed (for example, for a “chair massage”) or partially or fully undressed (in which case you will be covered by a sheet or towel; only the parts of your body that the therapist is currently massaging are exposed). Oil or powder helps reduce friction on the skin. The therapist may use other aids, such as ice, heat, fragrances, or machines. He may also provide recommendations for self-care, such as drinking fluids, learning better movement, and developing an awareness of your body.

### **Why People Use Massage Therapy**

In the 2002 national survey on Americans’ use of CAM, respondents who used a CAM therapy could choose from five reasons for using the therapy. The results for massage were as follows:

- They believed that massage combined with conventional medicine would help: 60 percent
- They thought massage would be interesting to try: 44 percent
- They believed that conventional medical treatments would not help: 34 percent
- Massage was suggested by a conventional medical professional: 33 percent
- They thought that conventional medicine was too expensive: 13 percent

### **Side Effects and Risks**

Massage therapy appears to have few serious risks if appropriate cautions are followed. A very small number of serious injuries have been reported, and they appear to have occurred mostly because cautions were not followed or a massage was given by a person who was not properly trained.

Health care providers recommend that patients not have massage therapy if they have one or more of the following conditions:

- Deep vein thrombosis (a blood clot in a deep vein, usually in the legs)
- A bleeding disorder or taking blood-thinning drugs such as warfarin
- Damaged blood vessels

- Weakened bones from osteoporosis, a recent fracture, or cancer
- A fever
- Any of the following in an area that would be massaged:
  - o An open or healing wound
  - o A tumor
  - o Damaged nerves
  - o An infection or acute inflammation
  - o Inflammation from radiation treatment.

If you have one or more of the following conditions, be sure to consult your health care provider before having massage:

- Pregnancy
- Cancer
- Fragile skin, as from diabetes or a healing scar
- Heart problems
- Dermatomyositis, a disease of the connective tissue
- A history of physical abuse.

Side effects of massage therapy may include:

- Temporary pain or discomfort
- Bruising
- Swelling
- A sensitivity or allergy to massage oils.

### **Some Other Points To Consider About Massage Therapy as CAM**

- Massage therapy should not be used to replace your regular medical care or to delay seeing a doctor about a medical problem.
- Before you decide about having massage therapy, ask the therapist about:
  - o Her training, experience, and any licenses or credentials
  - o Any medical conditions you have and whether she has had any specialized training or experience with them
  - o The number of treatments that might be needed
  - o Cost
  - o Insurance coverage, if any.
- If a massage therapist suggests using other CAM practices (herbs or other supplements, a special diet, etc.), discuss it first with your regular health care provider.
- For findings from research studies on massage therapy for various health conditions, see “For More Information.” However, the available literature is limited, and more research is needed to make firm conclusions.

## How Massage Therapy Might Work

Scientists are studying massage to understand what effects massage therapy has on patients, how it has those effects, and why. Some aspects of this are better understood than others. For example, it is known that:

- When certain forces are applied to the muscles, changes occur in the muscles (although those changes are not clearly understood or agreed upon).
- Massage therapy typically enhances relaxation and reduces stress. Stress makes some diseases and conditions worse.

There are many more aspects that are not yet known or well understood scientifically, however. Some of the proposed theories<sup>‡</sup> are that massage:

- Might provide stimulation that may help block pain signals sent to the brain (the “gate control theory” of pain reduction).
- Might shift the patient’s nervous system away from the sympathetic and toward the parasympathetic. The **sympathetic nervous system** helps mobilize the body for action. When a person is under stress, it produces the fight-or-flight response (the heart rate and breathing rate go up, for example; the blood vessels narrow; and muscles tighten). The **parasympathetic nervous system** creates what some call the “rest and digest” response (the heart rate and breathing rate slow down, for example; the blood vessels dilate; and activity increases in many parts of the digestive tract).
- Might stimulate the release of certain chemicals in the body, such as serotonin or endorphins.
- Might cause beneficial mechanical changes in the body—for example, by preventing fibrosis (the formation of scar-like tissue) or increasing the flow of lymph (a fluid that travels through the body’s lymphatic system and carries cells that help fight disease).
- Might improve sleep, which has a role in pain and healing.
- Might provide some health benefit from the interaction between therapist and patient.

More well-designed studies are needed to understand and confirm these theories and other scientific aspects of massage.

## NCCAM-Sponsored Research on Massage

Some recent examples of NCCAM-sponsored research on massage include:

- How massage affects healthy people, and whether these effects are different depending on how many massages are given and how often

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<sup>‡</sup> On this topic, see especially the reference by C.A. Moyer et al.

- The effects of massage on chronic neck pain, and comparing the benefits of conventional therapeutic massage with usual medical treatment
- Massage for cancer patients at the end of life, to see if massage helps relieve depression, improves emotional well-being and quality of life, and eases the process of dying
- Whether massage given at home by a trained family member helps reduce pain from sickle cell anemia.

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## For More Information

### NCCAM Clearinghouse

The NCCAM Clearinghouse provides information on CAM and NCCAM, including publications and searches of Federal databases of scientific and medical literature. Examples of relevant publications include *Manipulative and Body-Based Practices: An Overview*, *Selecting a CAM Practitioner*, and *Conference on the Biology of Manual Therapies, June 9-10, 2005: Conference Recommendations*. The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

Toll-free in the U.S.: 1-888-644-6226

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

Web site: [nccam.nih.gov](http://nccam.nih.gov)

E-mail: [info@nccam.nih.gov](mailto:info@nccam.nih.gov)

### PubMed®

A service of the National Library of Medicine (NLM), PubMed contains publication information and (in most cases) brief summaries of articles from scientific and medical journals. CAM on PubMed, developed jointly by NCCAM and NLM, is a subset of the PubMed system and focuses on the topic of CAM.

Web site: [www.ncbi.nlm.nih.gov/entrez](http://www.ncbi.nlm.nih.gov/entrez)

CAM on PubMed: [nccam.nih.gov/camonpubmed/](http://nccam.nih.gov/camonpubmed/)

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