

Toolbox

Massage therapies

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Therapeutic massage is the manipulation of the soft tissue of whole body areas to bring about generalized improvements in health, such as relaxation or improved sleep, or specific physical benefits, such as relief of muscular aches and pains.

BACKGROUND

Almost all cultures have developed systems of therapeutic massage. Massage techniques play an important part in traditional Chinese and Indian medical care. European massage was systematized in the early 19th century by Per Henrik Ling, who developed what is now known as Swedish massage.

Ling believed that vigorous massage could bring about healing by improving the circulation of the blood and lymph. In the past 20 to 30 years, complementary therapists have adapted Swedish massage to place greater emphasis on the psychological and spiritual aspects of treatment. Benefits of massage are

now described more in terms such as “calmness” or “wholeness” than in terms of loosening stiff joints or improving blood flow. In contrast to the vigorous and standardized treatment recommended by Ling, current massage techniques are more gentle, calming, flowing, and intuitive.

Several techniques derive from traditions separate from European massage. In reflexology, areas of the foot are believed to correspond to the organs or structures of the body. Damage or disease in an organ is reflected in the corresponding region, or “reflex zone,” of the foot. Palpation of this zone elicits pain or a pricking sensation, no matter how gently pressure is applied. Reflexology treatment consists of massage of the disordered reflex zones.

In aromatherapy, oils derived from plants (“essential oils”) are added to a base massage oil, which is a lubricant during treatment. Although often used purely for their fragrance, the oils are said to have a wide range of medicinal properties, including effects on wound healing, infection, blood circulation, and digestion. Also, they are thought to act both pharmacologically, by absorption into the blood through the skin, and by olfactory stimulation. Many massage practitioners use essential oils without claiming to be practicing aromatherapy.

Other complementary disciplines are primarily touch based or have a substantial touch component (see box).

WHAT HAPPENS DURING A TREATMENT?

Massage treatment takes a variety of forms and may last from 15 to 90 minutes. Treatment follows a case history, which is usually relatively short compared with other complementary therapies, but duration varies depending on the patient’s condition and the indications for massage. During a standard massage, practitioners will also gather palpa-

Summary points

- Almost all cultures have developed systems of therapeutic massage
- Massage treatment ranges from vigorous massage for increasing blood flow or loosening stiff muscles and joints to more gentle techniques that soothe and calm
- Practitioners generally treat the whole body while the patient is unclothed and lying down, but massage can be adapted to conventional health care settings by limiting the work to the head, hands, feet, or back or giving a neck and shoulder rub to a clothed patient who is seated
- Massage is mainly used to promote relaxation, treat painful muscular conditions, and reduce anxiety; it can also foster communication
- More research is needed on both the therapeutic benefits and the safety implications of using essential oils in massage, but the doses used are low, and problems seem to be extremely rare

tory information, which helps tailor treatment to individual needs. For example, a practitioner will devote extra time to massaging an area of increased muscle tension.

Ideally, the patient is unclothed on a specially designed massage table. This table nor-



Damien Lovegrove/SPL

A typical massage treatment session

Examples of other, predominantly touch-based therapies

Rolfing Structural integration Hellerwork	Uses deep pressure massage to improve function of muscular system
Alexander technique Feldenkrais	Educational system with exercises and hands-on therapy to improve posture, movement, and function
Bioenergetics	Massage to aid the psychotherapeutic process
“Bodywork”	Any combination of the above

mally incorporates soft but firm padding and a hole for the face. The treatment room is kept warm and quiet; soft music is sometimes played.

Practitioners generally treat the whole body, using oil or lotion to help their hands move over the patient's body. A variety of strokes are used, including effleurage, petrissage, kneading, and friction (see next box). Massage practitioners who treat sports injuries and musculoskeletal disorders may incorporate techniques derived from physiotherapy, osteopathy, and chiropractic, including deep massage, passive and active stretching, and muscle energy techniques (in which the patient moves against resistance from the practitioner).

Massage can be adapted to the constraints of conventional health care settings by limiting work to the head, hands, feet, or back or even by giving a neck and shoulder rub through clothes with the patient sitting in a chair.

Patients usually find massage deeply relaxing and pleasurable. Some techniques include strong pressure, which can cause painful sensations, but these are usually short lived.

THERAPEUTIC SCOPE

Primary uses of massage are to promote relaxation, treat painful muscular conditions, and reduce anxiety (often described in terms of "relief from stress"). Practitioners claim massage leads to short-term improvements in sleep disorders and pain, conditions known to be exacerbated by anxiety.

Massage practitioners and their patients also claim that massage improves self-image in individuals with physical disabilities and terminal illnesses. This result may be explained in part by the feelings of general well-being that are commonly reported after mas-

Reports of psychological benefits of massage

Patient in primary care—"I was very surprised after the first massage that I had been able to bring into the open all these fears and feelings. I most certainly would have been far less forthcoming and far less frank in a situation of psychotherapy—ie, sitting, fully dressed, face to face with a counselor."

Patient with AIDS—"It was wonderful to be touched by someone who wasn't wearing gloves."

Patient with physical disability—"When I was being massaged, it felt like a stroke up my back was traversing 3 countries. Massage made me aware of the splits and divisions in me. I certainly gain self-acceptance through touch."

Patient with mental ill health—"Massage showed me that I can let go and nothing terrible will happen."

sage. Touch itself is likely to be therapeutic, particularly for patients with limited opportunities for physical contact, such as those without intimate friends or family or with painful physical conditions.

Massage is also said to help patients feel cared for. Patients may be more ready to face and discuss difficult psychological issues when they are less anxious, feel better about themselves, and trust their care providers. Practitioners say that this sense of caring lead-

ing to better communication is one of the reasons why massage can be an important stepping stone to effective counseling, such as when managing mental health problems or addiction.

Other settings in which massage are used to foster communication and relationships include work with children with profound disabilities, where touch may be a primary means of communication. Similarly, some midwives run "baby massage" groups in which new mothers learn massage as a way to improve their relationship with their children.

Practitioners of reflexology claim that, in addition to the relaxation and nonspecific effects of massage, they can bring about more specific changes in health. One classic reflexology text, for example, includes case histories of ataxia, osteoarthritis, and epilepsy. Similarly, some aromatherapists report benefits in patients with conditions as diverse as infertility, acne, diabetes, and hay fever.

Research evidence

To date, most of the clinical trials of massage have focused on psychological outcomes of treatment. Good evidence from randomized controlled trials indicates that massage reduces anxiety scores in the short term in settings as varied as intensive care, psychiatric institutions, hospices, and occupational

Techniques used in massage

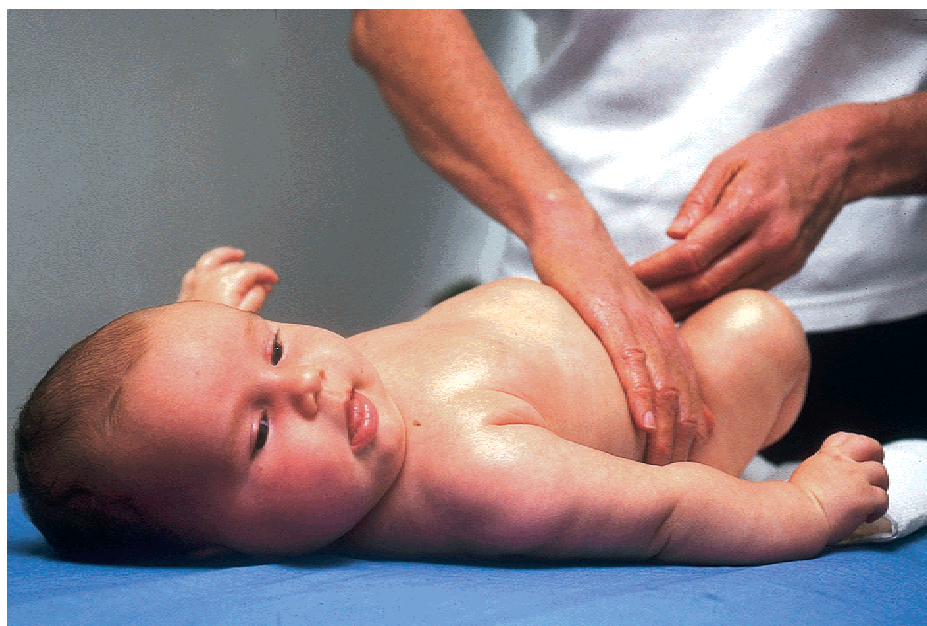
Effleurage—Gentle stroking along the length of a muscle

Petrissage—Pressure applied across the width of a muscle

Friction—Deep massage applied by circular motions of the thumbs or fingertips

Kneading—Squeezing across the width of a muscle

Tapotement—Light slaps or karate chops



Baby massage is one way of encouraging physical interaction and stimulating the developing relationship between parent and child

BMJ/Unike Preuss

Key studies of efficacy

Systematic review

- Vickers A, Ohlsson A, Lacy JB, Horsley A. Massage therapy for premature and/or low birth-weight infants to improve weight gain and/or to decrease hospital length of stay. *Cochrane Library*. Issue 3. Oxford: Update Software; 1998.

Randomized controlled trials

- Field T, Morrow C, Valdeon C, Larson S, Kuhn C, Schanberg S. Massage reduces anxiety in child and adolescent psychiatric patients. *J Am Acad Child Adolesc Psychiatry* 1992;31:125-131.
- Ahles TA, Tope DM, Pinkson B, et al. Massage therapy for patients undergoing autologous bone marrow transplantation. *J Pain Symptom Manage* 1999;18:157-163.
- Wilkinson S. Aromatherapy and massage in palliative care. *Int J Palliative Nurs* 1995;1:21-30.

health. Limited evidence shows that these anxiety reductions are cumulative over time. Practitioners claim that giving patients a concrete experience of relaxation through massage can facilitate their use of self-help relaxation techniques. Validity of this claim has yet to be evaluated. Evidence that massage can improve sleep and reduce pain remains anecdotal.

Some evidence supports the more traditional effects of massage, such as improved circulation and decreased muscle tension, although no reliable data link these changes to clinically worthwhile benefits such as relief of musculoskeletal pain, increased mobility, or improved athletic performance.

Evidence from randomized controlled trials shows that massage in premature infants is associated with objective outcomes such as more rapid weight gain and development. Other anecdotal benefits of massage are more subtle and have not been subjected to randomized controlled trials.

Few clinical trials show that any massage technique can have specific effects on conditions such as osteoarthritis, epilepsy, infertility, or diabetes. Likewise, few investigators have evaluated the relative advantages of different massage techniques.

SAFETY OF MASSAGE TECHNIQUES

Most massage techniques have a low risk of adverse effects. Cases in which complications

have occurred are rarely reported, and most involved the use of unusual techniques, such as extremely vigorous massage.

Contraindications to massage are based largely on common sense (for example, avoiding friction on burns or massage in a limb with deep vein thrombosis) rather than empiric data. Massage after myocardial infarct is controversial, although studies have shown that gentle massage is only a moderate physiologic stimulus that does not cause undue strain on the heart. No evidence suggests that massage in patients with cancer increases metastasis, although direct firm pressure over sites of active tumor should be avoided.

The safety of the oils used in aromatherapy has raised concern. Although essential oils are pharmacologically active, and in some cases potentially carcinogenic in high concentrations, adverse events directly attributable to them are rare. This complication rate may be low because, in practice, the oils are used externally and in low doses (concentrations of 1% to 3%). The lack of a formal reporting scheme for adverse events in aromatherapy, however, means that the safety of essential oils has not been conclusively established.

Massage obviously involves close physical contact. To minimize the risks of unprofessional behavior in this situation, patients should ensure that practitioners are registered with an appropriate regulatory agency.

PRACTICE

Like many complementary therapies, massage is usually practiced privately in the community. It is also used in conventional health care settings, particularly in hospices and in units for patients with learning disability and mental health disorders. In these settings, massage is often practiced by nurses or by unpaid practitioner volunteers; often it is applied informally, as in the form of a head and neck rub for a distressed patient. Increasingly, however, professional massage practitioners are now employed in conventional health care settings.

Regulation

In the United States, regulation of massage therapists differs from state to state. Although more than 30 states demand state licensure, delineating particular requirements, criteria,

Umbrella organizations involved in registering massage-based therapies

American Massage Therapy Association

820 Davis Street, Suite 100
Evanston, IL 60201-4444
847-864-0123
www.amtamassage.org

Associated Bodywork & Massage Professionals

1271 Sugarbush Drive
Evergreen, CO 80439-7347
1-800-458-2267
www.abmp.com

National Certification Board for Therapeutic Massage and Bodywork

8201 Greensboro Drive, Suite 300
McLean, VA 22102
1-800-296-0664
www.ncbtmb.com

and testing, other states require less formal training, such as a certificate program. Others have no regulation at all, asking only that therapists register their practice as a business venture.

The recently established National Certification Board for Massage provides continuity for the profession and national certification. Other national organizations include the American Massage Therapists Association and the Associated Bodyworkers and Massage Professionals. Aromatherapy and reflexology are not regulated in the United States.

Training

As with regulation of massage therapy, training programs differ based on state-to-state regulations. In the states that require state licensure, schools and training programs offer from 500 to 1,000 hours of comprehensive study and training; some programs award an associate's degree in Massage Therapy and Allied Sciences. Completion of these programs prepares the practitioner for the state board examinations. Other schools offer a certificate program, the curriculum for which ranges from 100 hours to a mere weekend of training. In states completely without regulation, practitioners may participate in a 1-day afternoon workshop, taken at their discretion.

Further reading

Vickers A. *Massage and Aromatherapy: A Guide for Health Professionals*. Cheltenham, UK: Stanley Thornes; 1998.