

Healing bodies: the ancient origins of massages and Roman practices

Silvia Iorio¹, Silvia Marinozzi¹, Valentina Gazzaniga²

¹ Unit of History of Medicine Department of Molecular Medicine, Sapienza - University of Rome, Italy; ² Department of Medico-Surgical Sciences and Biotechnologies, Sapienza - University of Rome, Italy

Abstract. The practice of body manipulation with therapeutic aims has been used in the Western world since the origins of Hippocratic medicine. By retracing the therapeutic use of massage as a therapeutic, preventive and educational practice, the authors attempt to highlight the concepts, techniques and methods of massage and the manipulation of the body in order to offer a valuable and useful historical reconstruction concerning ancient medicine. The study on the relationship between culture, diseases and medicine constitute a significant part of the historical medical research carried out within the Research Project of National Interest PRIN entitled 'Disease, health and lifestyles in Rome: from the Empire to the early Middle Ages' funded by the Ministry of Education, MIUR University Research in 2015

Key words: massage, therapy, ancient medicine

The practice of the manipulation of the body for medical purposes has been used in the Western world since the origins of rational Hippocratic medicine (1). Although the word 'massage' has been related in a number of different ways, in its etymology, to the Hebrew term that indicates kneading, as well as to the Arabic term that indicates the practices of lightly touching and to the Sanskrit root *makch*, which indicates pressure (2), we can be certain that the word used in the texts of Greek medicine is the derivation of the verb *anatribein*, from the most frequently used term, *anatripsis*, which indicates the act of rubbing and kneading, but also that of caressing and making something smooth and uniform. The most common use of this term, corresponding to the word *friectio* in Latin medical literature, are found in non-medical literature, in particular in the texts of the Homeric epic as well as, with greater frequency and conceptual importance, in some treatises of the Corpus Hippocraticum, the set of writings that the Alexandrian tradition ascribes to Hippocrates of Cos, founding father of rational medicine.

Whereas in the Iliad and the Odyssey the massage with oils and aromatic substances is mentioned as a means to relax the tired limbs of warriors and a way to help the treatment of wounds, along the lines of a tradition of care that had already been attested in the therapies practiced inside the Asclepius temples – with the use of natural substances, herbs and ointments – this practice becomes a tried and true therapeutic practice in Hippocratic medicine.

The work on *Articolazioni* (joints), cited in the list of Eroziano and commented by Galen, traditionally attributed to the school of Cos and dated between the end of the 5th century and the beginning of the 4th century BCE (3), deals a great deal with massage as a healing technique following the dislocation of the shoulder and knee, pathologies that tend to recur (4). In the case of shoulder dislocation, which should be treated with a wax bandage and a wool pad to be placed under the armpit to keep the bone in the correct position, the arm should be held up so that the head of the bone should be placed as far away as possible from the anatomical site in which the dislocation pushed it.

At this point, the doctor can practice a massage, which should be carried out “softly and with persistence”. The importance attributed to this technique is clearly highlighted by this step, in which we see the act of carrying out the massage is not given to simple or practical ‘hand operators’, who share their skills with *cheirourgoi*, but rather the massage is formally assigned to the Hippocratic physicians, who are required to have a vast array of skills and expertise, an integral part of which is the knowledge of the manipulation of the body. The importance given to the technique is further confirmed by the fact that Hippocrates promises, within this context, to dedicate another treatise entirely to the manipulation and massages. He stresses that, although the word *anatripsis* can be used in a variety of contexts, the meaning attributed to this word changes a great deal according to the contexts in which it is used: massage is the practice aimed at solidifying and tightening a joint that is too loose, yet massage is also used to relax articulations or joints that are too tight or rigid.

Manual actions carried out on the body surface are useful as ‘internal’ treatments, i.e. pharmacological; anointments, effusions, friction and cataplasms correct the possible imbalance of the body, in which everything is based on an ordered relationship between ‘inside’ and ‘outside’ (5). Therefore, much like any other therapeutic technique, massages serve to restore the level of dryness, humidity, or heat to the body, having lost this balance during a pathological process (6).

However, in the case of a dislocation, massages are used as an operation of extreme delicacy, which must be carried out with a great understanding, “without violence” and, to the extent that this is possible, without giving the patient additional pain. Thanks to massage, Hippocrates claims that the healing is complete, with variable times depending on the severity of the case.

In his treatise *Officina del medico* (The Workshop of the Doctor), traditionally ascribed to the ancient group of surgical documents of the Cos school, chapter 17 is entirely dedicated to the topic of unbundling and massage that, according to tradition, are associated with the skills required by surgeons, together with the ability to correctly perform a curative or corrective bandage. The treatise offers the most systematic description of the purpose of massage, which can alternately relax or solidify body parts, increase or decrease

muscle mass. The fundamental qualities that define Hippocratic physiopathological theories also recur in the definition of the type of massage – dry rubbing (friction) is used to give tone, while softer massages are useful for relaxing muscles and joints. Timing and frequency also play an important role: if practiced frequently, massage induces weight loss; if practiced on a moderate basis, it strengthens and solidifies the body.

The same treatise indicates the technique that is useful for correcting a series of physical defects, in particular regarding diastases, fractures and small displacements of the joints, or feet that are displaced towards the front or back, where the therapeutic massage must follow bandaging without compression, and must be directed to return the body part in the direction opposite the deviation or displacement, forcing it even a little beyond its natural position.

The therapeutic use of massage is also evident in the purely clinical treatises, such as the book on *Epidemie* (Epidemics), in which we find massages cited as a surprising remedy to a case of deafness that afflicting Acanto’s cook, who was suffering from the annoying consequences of a phrenitis (*delerium*). Other rather ‘bizarre’ applications of massages are reported in the Treatise on Internal Affections, which indicates this therapy as a useful therapeutic tool even in the treatment of tetanus, whose clinical description is described with great precision and clarity – the disease is known as severe and often untreatable, and can be treated with fumigations that introduce continued applications of warm oil on contracted body parts. In this case, the oil should be mixed with wormwood and bay leaves, grains of *hyoscyamus* that are ground up in white wine and in a “new jar”. These are odorous substances, whose supposed effect is to relax, due to their pleasantness, the tight muscle fibres caused by the disease. For this reason, when treatment is applied on the body and head, the patient should be left to rest for a long time so that he or she can “absorb” the positive qualities transmitted by the *pharmakon*.

The use of herbs or drugs from the animal or vegetable world in association with massage oil is a common practice: the oily substances used by the doctor during massage therapy can be combined with herbs such as coriander and cumin, or substances such as

Egyptian nitro, burnt and mixed with fat. Anointing can also be used on specific parts of the body, as highlighted by a case in which it is used on a patient suffering from ulcerated haemorrhoids (7). However, the effects of the therapy in this case were not beneficial. Unfortunately, the ulceration turned into a *karkinoma* and led to the death the patient.

In other cases, described in the gynaecological treatises (8), the repeated unction of the external genital organs and the uterus with substances that had a very strong or even repellent odour serve to prevent the dislocation of an organ that ancient medicine considers capable of moving inside the body, “like an animal”, attempting to reach the proper level that the feminine nature, cold and humid, physiologically imperfect, is not able to ensure for reproductive organs in the absence of sexual relations and heat that only the correct contact with the male is able to procure.

In Hippocratic therapy, friction and anointing of the body are often associated with rubbing, either moderate or more vigorous, depending on the body's makeup and the patient's health. The therapy also includes wrestling and exercise or gymnastics, which heat the surface of the body and allow for the release of humours that are wet or humid. Both techniques (gymnastics and massage) force the external parts of the body to make a useful effort, warming the tissues, solidifying and developing muscle mass, condensing – through the movement – the parts of the body that according to nature are compact, adding volume those that are deeper, such as the veins (9). The process is favoured by the onset of heat, triggered by the manual skills and expertise of the doctor, carried out on the area to be treated, which causes the flesh, heated and deprived of excess moisture, to more easily attract the nourishment provided by veins.

Massage is certainly not simply an accessory to ancient therapy, but rather a strategy of treatment with the same value as pharmacological intervention, phlebotomy or cupping – such importance remains a sign also in the passage of the tradition of Greek medicine in Rome.

Aulus Cornelius Celsus, Roman encyclopaedist who lived between the 1st century BCE and 1st century CE, author of an encyclopaedic work on the Arts of which only the book dedicated to medicine survives

today (9), dedicated the 14th chapter of the book to massage and the history of this practice.

Here we find the name of Asclepiades, a Greek doctor practicing in Rome in the 1st century BCE, as the ‘inventor’ of massage therapy, mentioned in the treaty *Communium Auxiliorum* (on common remedies) together with the treatment based on water and gestation (therapeutic treatment that involves the oscillation and soft movement of the patient, on a stretcher, in gestation chair, or on a boat) as a therapeutic system for all the diseases. Celsus recognizes Asclepiades with the merit of having given importance to *frictio*, having indicated the best use of this method, however he places the history of massage much earlier, emphasizing the importance that massage had within the Hippocratic tradition and in the authentic writings of the teacher from Cos. Hippocrates was the first to argue that the forceful massage strengthens the body. When done softly, it aims to make the body softer. When used repeatedly, massage tends to thin the body, and when used moderately, the therapy helps make the body more robust.

Therefore, indications for massage treatment are quite clear: the massage must be prescribed in the event that the body must be firmed because it is limp, or softened because it is contracted or tense; it can be indicated if there is a humour excess to be dissipated and dispersed throughout the entire body; it is useful if the body is weak, as a supplement to the diet, in order to reconstitute the body's fibre.

Celsus takes time to analyze the principle according to which massage seems to work, even though it does not concern the competence of the doctor (*quod iam ad medicum non pertinet*). He deals with the concept of subtraction (*quae demit*), because living bodies become tight if the principle that made them relax is taken away. Likewise, they soften, by subtracting that which “created hardness” inside. They become full, not because of the friction itself, but because the massage allows the best penetration into the tissues of food already subjected to digestion processes. For Celsus, the vast array of effects depends on the way massages are practiced. Friction and anointment (*unctiones*) are not the same thing, due to the fact that their indications differ: the anointing of the body or part of it and soft rubbing is also indicated in the case of acute and recent illnesses,

during remission, while the prolonged use of the friction is not useful in acute diseases and not even in those that are worsening, except in the case of frenetic illnesses, in which the massage attempts to induce sleep in the patient. Along general lines, massage is a remedy indicated in long-term illnesses that are not at the initial stage, in which their aggressiveness is less evident. Therefore, massages must be used after the signs of a first improvement, and never if there is, for example, an increasing fever. The best indication would be when the body is completely free from chills, or when the disease begins a process of remission. The doctor will determine from time to time whether the massage should be extended to the whole body, or if only one part of it should be treated, affected by a weakness or an illness.

Celsus also offers several indications for the use of massages: recurrent and long-lasting headaches, as well as paralysis to certain limbs, benefit greatly from friction therapy, which can restore vigour and strength to the parts of the body affected by the illness.

Not always can the doctor directly treat the affected body part: in some cases, the treatment will only serve to 'recall' matter from the upper or middle parts of the body, through the rubbing of the lower parts.

For Celsus, there is no clear rule regarding the amount of massages that must be prescribed. However, it is important to understand the strength and the degree of resistance of each patient. If the patient is weak, fifty movements may suffice. If the patient is strong, he or she will also be able to handle two hundred, and medium severity cases require intermediate treatments. The ancient theory of the constitutions of gender and age is clearly expressed here: women, who are incomplete, weak and humid beings, can handle a lower number of massages than men, and so the children and the old, other 'liminal' categories of Hippocratic physiology.

The doctor's hands *dimovendae sunt* in local applications, using many vigorous actions if one intends to disperse matter that has accumulated, or mild and limited over time if the disease is extended to the whole body. In the latter case, requires only that the skin's surface is softened, in order to facilitate assimilation of the new matter taken into the body with food.

Based on the Hippocratic principle that gives cold a negative quality, massage, which warms the body's

surface, can rightfully *alicui medicinae locum facere*: again, not a palliation, but an effective substitution to pharmacological therapy.

Perhaps the most interesting discussion on massage in Rome is that offered by Soranus of Ephesus (90-150 CE), the methodical doctor who wrote a treatise on diseases in women, childbirth, and the care and treatment of the newborn (10). Soranus also goes beyond the therapeutic massage – massage is an educational gesture of the body, a modelling (*to diaplasmòn*) that tends to guarantee the newborn beauty, proportion and health. It is a hygienic and preventive practice, whose importance is that it can help shape the perfect *cives romanus* in the body.

This aspect of massage as a preventive practice will find full application in the 'hygienic' work of Galen of Pergamus, the *De sanitate tuenda* (11), in which a large part of the second book is dedicated to a discussion and study of massage.

Galen discusses and comments on the entire tradition he had before him, from Hippocrates to the gymnasts who are cited as experts in massage at the same level as doctors. The body must be warmed up so that its fibres are ready to receive the beneficial effects transmitted by the oil, through repeated gestures, of medium intensity and speed. When the skin turns red – which indicates good health – the person carrying out the massage must place their hands on the person, without forcing the body into a position that is unnatural: they must work slowly first, then with increasing strength, in order to exert pressure once or twice in every single part of the body. The massage must be balanced, neither all directed upwards, nor all downwards, but in a balanced way, with oblique, transverse, straight and sub-transverse movements. The transverse movement is for Galen the one contrary to the a straight movement; sub-transverse is the one that is directed a little towards one or the other part; the sub-rectum movement moves away from the right in one direction rather than in another; the oblique movement is half-way between the straight and transverse movement. Galen, following his complex anatomical-physiological systems, builds a theory also structured on massage: the important thing is that the movement affects in a balanced way all the muscle groups, in every direction. Each gesture, in its directionality, obtains a different

effect. The transverse massage, which in Rome some call “round”, hardens, contracts and tightens the tissues, while the “straight” massage makes them soft and loose, relaxes, softens and loosens the body. Much like Hippocrates, Galen recognizes that massages can be used in various ways for the solution of various pathological situations. For each type of massage, there is a structured gradation of effects in a theory of degrees and intensities that are typical of Galen’s thought process (13 Montraville R & Green MD 1951).

If similar actions cure similar problems, in short – soft massages soften, vigorous massages strengthen – this should be combined with an understanding on the frequency and intensity of the rubbing and “friction” that are the true prelude to a theory behind the workings of therapeutic massage that will last for centuries.

While falling from grace as a therapeutic practice during the Middle Ages and the early modern era (12), massage will retain its specific healing role in the thermal baths, in the practices of the Roman “stufaroli”, until arriving, with Ambroise Paré, to the official recognition of massage as a therapeutic practice to support surgery, renewed and improving over time.

References

1. Thompson CJS. *Massage in antiquity and its practice in ancient Greece and Rome*. London: Wellcome Historical Medical Museum; 1923.
2. Burguière P, Gourevitch D, Malinas Y ed. *Maladies des femmes In: Soranos d’Éphèse*. Paris: Les Belles Lettres; 1988.
3. Jouanna J. *Hippocrate*. Fayard, Paris, 540. Calvert RN ed 2002 *The history of massage: an illustrated survey from around the world*. Rochester: Healing Arts Press; 1992.
4. Withington ET ed. *Hippocrates III In: Corpus Hippocraticum On the Articulations 9*. Loeb Classical Library 149. Harvard: Harvard University Press; 1928.
5. Jones WHS ed. *Hippocrates IV In: Corpus Hippocraticum Regimen II 64*. Harvard; Loeb Classical Library 150, Harvard University Press; 1931.
6. Jones WHS ed. *Hippocrates Collected Works*. Harvard: Harvard University Press Cambridge; 1868.
7. Potter P ed. *Hippocrates VI In: Corpus Hippocraticum Internal Affection 52*. Loeb Classical Library 453, Harvard: University Press Harvard; 1988.
8. Potter P ed. *Hippocrates VI In: Corpus Hippocraticum Places in Men VIII*, Loeb Classical Library 482, Harvard: Harvard University Press; 1995.
9. Spencer WG ed. *De Medicina In: Celsus*. Massachusetts: Harvard University Press; 1971.
10. Burguière P, Gourevitch D, Malinas Y ed. *Maladies des femmes In: Soranos d’Éphèse*. Paris: Les Belles Lettres; 1988.
11. Montraville R, Green MD ed. *Galen’s Hygiene In: De Sanitate Tuenda II*. Springfield: Thomas Copyright; 1951.
12. Calvert RN. *The history of massage: an illustrated survey from around the world*. Rochester: Healing Arts Press; 2002.

Correspondence:

Silvia Marinozzi

Unit of History of Medicine Department of

Molecular Medicine, Sapienza

University of Rome, Italy

E-mail: silvia.marinozzi@uniroma1.it