

Supplemental Table 1 The mechanisms of massage therapies

Massage modality	Mechanisms
Foot reflexology	<p>1. Foot reflexology provides patients with a time to relax, focusing their attention on the foot and the reactions caused by the massage, which can distract their attention and reduce pain.^[1] Simultaneously foot reflexology can provide great warmth and comfort to patients, making them mentally happy, feeling relaxed, and alleviating the pain they have suffered.</p> <p>2. Foot reflexology utilizes the close relationship between the foot and meridians, organs, and qi and blood. By massaging the basic reflex zone and the corresponding reflex zone of diseased organs or systems, it regulates the body's meridians and stimulates the regulatory effect of the meridians.^[2] The function of the meridians is to stimulate the nerve receptors in the airway gap through the movement of the meridians and qi, which are transmitted from the peripheral nerve to the central nerve to the cerebral cortex, and the information feedback of the nervous system can mobilize the internal disease resistance potential of the body, adjust the viscera, nourish and defend the qi and blood, so as to achieve the effect of disease prevention and treatment.</p> <p>3. Foot reflexology can regulate the secretion of pain related factors, such as β - Endorphin, and break calcium crystals and uric acid accumulated in nerve endings and opens blocked nerve pathways, and improves blood flow in the entire body.^[3]</p>
Acupressure massage	<p>Acupressure massage can increase the temperature of the massaged skin, speed up the metabolism of local tissues and cells, so as to dredge the meridians, promote qi and blood circulation, eliminate arthralgia and relieve pain.^[4]</p>
Hand acupressure	<p>1. The extensive connection between the hands and the meridians of the viscera can be achieved by massaging specific acupoints on the hands through the meridian system, which can regulate the function of the viscera and meridians, thereby treating diseases in various parts of the body.^[5]</p> <p>2. The hand nerve is dominated by the three branches of the median nerve, radial nerve and ulnar nerve. The motor and sensory nerves from the brachial plexus are densely distributed in the hand, enabling the hand to sense very subtle changes and perform very delicate operations. And from the distribution of the cerebral cortex, compared with other parts of the body, the hand occupies the largest area. Based on the reflex activity between the hand and the cerebral cortex, the neuroreflex theory believes that stimulating the corresponding projection points of the hand can produce a direct effect on the cerebral cortex, so as to achieve the purpose of regulating the physiological function of the human body.^[5]</p>

Massage modality	Mechanisms
Classical massage sessions	Classical massage techniques stimulate vasomotor nerves resulting in improved systemic venous and lymphatic blood flow, and cause to local hyperemia, which contributes to an increase in the local blood microcirculation. ^[6]
Tuina therapy	Tuina therapy can stimulate the meridians, promote blood circulation, dredge lymphatic vessels, and achieve the effects of promoting blood circulation, dispersing blood stasis, and soothing the meridians. ^[7]

References

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