

UNIVERSITY OF BRITISH COLUMBIA
SCHOOL OF REHABILITATION MEDICINE

REVISED MEMORANDUM ON TECHNIQUES AND EFFECTS OF MASSAGE

The Chartered Society of Physiotherapy.

The statement on the Techniques of Massage issued by the Chartered Society as an interim report in August 1952 included various observations on certain effects claimed, and recommended the deletion of some of these. This statement has now been revised to include more detailed definitions of techniques and amendments with regard to some of the effect obtained. The following is intended as a guide only, as there are bound to be slight variations in technique which cannot be included in a brief statement, and which must be left in any case to the Physiotherapist to apply, having regard to the particular needs of the individual patient.

The massage techniques described below may be applied to any part of the body, but require modification according to the site and condition treated. The patient and physiotherapist should each be in a comfortable position, the former with the part to be treated fully supported, so that relaxation is possible, and the latter, so that there is complete freedom from tension. As the performance of most massage manipulation requires movements of all parts of the body to a varying degree, and not of the hands alone, the stance and posture of the physiotherapist are of the utmost importance.

STROKING MANIPULATIONS - Effleurage

Technique:

A stroking movement in the direction of the flow in the veins and lymphatics. The hand or hands must be relaxed and moulded accurately to the shape of the limb or part being treated. The stroking should be done with even pressure - the degree of pressure and the rate may vary according to the condition or part to be treated. The pressure must be maintained throughout the movement and the stroke carried to the nearest group of superficial lymphatic nodes. When small areas such as the face, hand or foot are treated the effleurage is done with the fingers and/or thumb.

- Effects:
- a) By mechanical pressure the flow of blood in the superficial veins is hastened towards the heart; when pressure is released the presence of valves in the veins prevents backward flow.
 - b) Lymph flow is accelerated in a similar manner. Therefore the flow of blood is hastened in the subcutaneous tissues.
 - c) The mobility of the superficial soft tissues is increased.
 - d) The stimuli applied to the skin by deep effleurage may cause vasodilatation of the arterioles through the so-called "axon-reflex".

StrokingTechnique:

A gliding movement performed in any direction on the surface of the body. The stroking can be deep or superficial and the speed varied according to the effect required. The effects are produced primarily reflexly.

- a) They may be sedative or stimulating to the nervous system.
- b) Deep stroking may cause dilatation of the arterioles.

PRESSURE MANIPULATIONS OR PETRISSAGE

Primarily manipulations of muscle.

KneadingTechnique:

The muscles and subcutaneous tissues are alternately pressed inward and upward, being squeezed, compressed and released in a rhythmical manner. The hand or hands glide imperceptibly over the area under treatment during the relaxation phase. The speed and depth can be varied.

Modifications:

- 1). Small areas are treated with the tips of the fingers or thumb.
- 2). Squeeze-kneading: the tissues are squeezed in the operator's hands.
- 3). Reinforced kneading: one hand is placed over the other to increase the depth of the manipulation.

Picking Up (one or both hands)Technique:

The muscles are grasped, lifted, squeezed and released. During the lift the fingers and thumb(s) should be controlled by the intrinsic muscles and the palm(s) must not lose contact with the skin.

Wringing (two hands)Technique:

The tissues are grasped with both hands, lifted, and then the hands move alternately, backwards and forwards across the long axis of the muscles, stretching the tissues.

Skin Rolling (two hands)Technique:

The hands lie flat on the surface. The skin and subcutaneous tissues are grasped between the fingers and thumbs. The tissues are then rolled forwards or backwards against the fingers or thumbs.

- Effects:
- a) by alternately compressing and releasing the muscles the venous return is mechanically assisted.
 - b) the flow of lymph is affected in a similar way.
 - c) if vigorous, it will cause vaso-dilatation in the skin which will become red and hyperaemic and the temperature of the part will be slightly raised. This effect is produced by nervous and probably chemical stimulation.
 - d) slow rhythmic petrissage may be used to reduce muscular tension and induce relaxation. Conversely, a brisk rhythm frequently produces an invigorating effect.
 - e) skin and fibrous tissue can be mobilised.

FrictionsTechnique:

These are small accurately localised, penetrating movements performed in a circular or transverse direction. They are performed by the thumb or finger tips and the superficial tissues are moved on the deeper ones, the depth varying with the structure to be affected. In no case is there movement of the finger or thumb on the skin. Circular frictions should progressively increase in depth and transverse frictions should maintain even pressure throughout.

- Effects:
- a) Frictions cause a local hyperaemia by producing a histamine-like substance.
 - b) Mobility is resorted mechanically in various structures which, from their nature or position, are apt to develop adhesions.

PERCUSSION MANIPULATIONS OR TAPOTEMENTTechnique:

Tapotement consists of a series of manipulations in which the hands strike the body. The hands usually work alternately and the wrists are kept flexible so that the movements are springy and invigorating.

- a) Hacking: Performed with the ulnar border of the little finger either alone, or supplemented by other fingers. The wrist is held in some extension and the movement is one of pronation and supination.

b) Clapping: The hands are cupped and the forearms pronated. Alternate flexion and extension of the wrists bring the hands sharply into contact with the body, resulting in a rather deep-toned clapping sound.

c) Beating: This is similar to clapping but is performed with a loosely clenched hand so that the dorsal aspect of the fingers and the base of the hand come into contact with the part being treated.

d) Pounding: A movement similar to hacking with a loosely clenched fist striking the part with the ulnar border of the hand.

Effects:

1. If carried out vigorously reddening of the skin is produced by chemical and reflex action.
2. Evacuation of excessive secretions from the air passages can be mechanically assisted. Coughing may be induced. These effects are enhanced when combined with postural drainage.
3. Spinal backhacking induces a sense of warmth and invigoration by stimulating sensory nerve endings.
4. The stretch reflex of muscle may be evoked if percussion is used in a specialized way.

SHAKING AND VIBRATION MANIPULATIONS

Technique: a) Shaking: A rhythmic shaking of a part of the body performed by holding the part with one or both hands, moving it from side to side or up and down, or in and out.

b) Vibration: A fine form of tremor conveyed through the hands or finger tips.

Effects:

1. Shaking mechanically produces movement of gases and fluids.
2. Vibrations have a milder but similar effect to shaking.
3. Vibrations used in a modified way may reflexly produce a sedative effect.

CONCLUSION - It is hoped that further investigations may indicate additional value of massage, but claims of effects going beyond those stated above should be substantiated.