

PARAFFIN WAX BATH

Physiological Effects of heat

Hemodynamic effect

Neuromuscular effect

Metabolic effect

Tissue extensibility

Pain and muscle spasm: especially in the distal extremities

Indications

- Pain and muscle spasm: especially in the distal extremities.
- Degenerative joints disease. Especially in sub-acute and early chronic stages or inflammation. Caution is needed in acute phase of arthritic pain and swelling.
- Adhesions and scars : wax softens and facilitates the mobilization and stretching procedures.

Contraindications

Ischemia. e.g., arterial insufficiency Haemorrhage. there is an increased arterial and capillary blood flow with heat Impaired sensation. e.g., spinal cord injury (SCI) may predispose to burns Inability to communicate or respond to pain. e.g., dementia

Malignancy. May increase tumour growth Acute trauma or inflammation.

Diffusion across membranes is increased Scar tissue.

Elevation of temperature increases the metabolic demand of the tissue.

Scar tissue has inadequate vascular supply, and is not able to provide an adequate vascular response when heated, which can lead to ischemic necrosis.

Poor thermal regulation

Advantages

Useful for pt. with poor heat tolerance, dry scaly skins, after Plaster of Paris removal. Can be followed by therapeutic exercises.

Can be carried out at home.

Wax can mold around the bony contours of feet & hands. Heat is applied evenly by conduction.

Disadvantages

Effective only for distal extremities in the terms of ease of application. No method of temperature controls once applied.

Heating last only about 20 minutes. It is a passive treatment: exercise may not be performed simultaneously.