USING HEAT THERAPY DURING SOFT TISSUE REPAIR

Understanding the use of heat treatments during soft tissue repair

Physiological/neurological effects of using heat

- Increased local metabolism
- Increase in blood flow, vasodilation, erythema
- Increased oedema
- Increased haemorrhaging
- Analgesia
- Reduced muscle spasm
- Increased soft tissue extensibility
- Increase in nutrient delivery to damaged tissue

Uses of heat therapy

- Sub-acute and chronic healing stages
- Pain relief - ‘pain gate theory’
- Stimulate vasodilation to increase circulation
- Local and general relaxation
- Passive warm-up prior to use of other techniques

Method:

- Duration: 5-30 minutes
- Heat temperatures around 40°- 45°

Methods of applying heat

- Infrared lamp
- Wax bath
- Hot compress
- Hot packs
- Heat pads
- Silica gel packs
- Hot water bottle
- Immersion
- Hydrotherapy

Contra-indications to heat treatments

- Acute phase of injury (inflammation present)
- Decreased sensitivity to heat
- Recent haemorrhage of the treatment area
- Skin carcinoma or skin condition that can be worsened by heat
- Deep vein thrombosis (DVT)
- Acute dermatitis
- Dysfunctional circulatory system

Precautions:

- Impaired local circulation
- Damaged or infected tissue

Adverse reactions to heat treatments

- Burns
- Scalds
- Chemical burn
- Increased blood pressure
- Decreased blood pressure
- Muscle metabolic fatigue
- Optical damage
- Dizziness
- Nausea
- Headaches
- Increased oedema
- Heat stroke
- Discomfort/pain

Actions to take in event of adverse reactions:

- Remove heat source
- Cool skin rapidly under running water
- First aid if required
- Seek medical attention if necessary