

HOT PACK APPLICATION

1. AIM

- Provision of non-invasive pain relief

2. PATIENT

- Woman requesting a hot pack for pain relief, with the exclusion of postnatal woman whose neonate is rooming-in

3. STAFF

- Medical, nursing and midwifery staff
- Physiotherapist

4. EQUIPMENT

- Hydrocollator
- Long handled tongs
- Hot pack
- Towels
- Plastic bag

5. CLINICAL PRACTICE

- Assess the woman's skin appearance for the presence of:
 - haematoma
 - laceration(s)
 - open wound(s)
 - cellulitis or other skin infection
 - applied balms or liniments
 - radiation site(s)
- Do not commence heat therapy if any of these skin anomalies are present
- Do not apply a hot pack if the woman has:
 - Impaired consciousness/cognition
 - Impaired sensation
 - Restricted movement
 - Impaired circulation e.g. epidural analgesia
 - Elevated temperature
 - Acute inflammatory condition(s)
 - Language or communication difficulties
- Remove hot pack from hydrocollator using long handled tongs. Check condition for wear or any leaks. Discard if damaged
- Cover hot pack with plastic bag to reduce risk of contamination from body fluids and leakage from pack
- Wrap hot pack in thick cloth, e.g. a towel or baby blanket, ensuring two layers of cloth covering all surfaces of hot pack, and secure with tape

HOT PACK APPLICATION cont'd

- Test the temperature of the pack. It should feel warm to the inner wrist. A woman may tolerate more extreme temperatures during labour. A partner or caregiver should test the temperature of the hot pack on themselves first. If they can comfortably tolerate the hot pack for several seconds pressing against their own forearm/wrist, it is then safe to apply to the woman with intact sensation
- Advise the woman:
 - To expect mild comfortable warmth only
 - There is a danger of being burnt if heat is more than mild
- Apply hot pack to affected area, ensuring woman is comfortable
- Ensure the woman can reach and activate the call bell. Instruct her to call for assistance and remove the hot pack if it feels too hot or causes discomfort
- Check the site where the hot pack has been applied 3-5 minutes after the initial application
- Observe and document signs of erythema, skin discolouration or blistering. The heat source must be removed to prevent thermal injury if there is any excessive erythema, maceration, pronounced pallor, blistering or increased swelling

6. DOCUMENTATION

- Medical record

7. EDUCATIONAL NOTES

- Hot packs may only be heated in a hospital approved warming device as per manufacturer's instructions.
- Placing two layers of thick cloth between the woman's skin and the hot pack is required to protect from the possibility of skin damage.
- Heat stimulates the thermoreceptors in the skin and deeper tissues. This can help to reduce pain by closing the gating system in the spinal cord.³
- The gate control theory "proposes that within the spinal cord there is a pain gating mechanism that modulates pain transmission. Painful impulses carried into the spinal cord via the small diameter sensory fibres open the gate to allow pain signals to be transmitted to the brain. In contrast, impulses carried via larger diameter sensory fibres which respond to warmth, coolness, massage and transcutaneous electrical nerve stimulation help to close the gate, therefore modulating the transmission of painful impulses and leading to a reduction in pain."⁴
- Warm packs and thermal manual methods may have a role in reducing pain, reducing length of labour and improving a woman's sense of control and emotional experience of labour.⁵
- With appropriate safety precautions, heat offers comfort and relief, and its use should be dictated by the desire and responses of the woman.

8. RELATED POLICIES/ PROCEDURES/CLINICAL PRACTICE LOP

- Nil

9. Risk Rating

- Low

HOT PACK APPLICATION cont'd

10. NATIONAL STANDARD

- Standard 5 – Comprehensive Care

11. REFERENCES

1. King Edward Memorial Hospital. Women and Newborn Health Service. Clinical Guideline: Pain Management: Heat – Local Application Feb 2019
2. Simkin P, Bolding A, Update on nonpharmacologic approaches to relieve labor pain and prevent suffering. J Midwifery Women's Health 2004, 49(6)
3. Carr E, Mann E (2000) Pain: Creative Approaches to Effective Management. London, Macmillan Press.
4. Chandler A et al (2002) Using heat therapy for pain management. Nursing Standard.17,9. 40-42
5. Smith CA, Levett KM, Collins CT, Dahlen HG, Ee CC, Suganuma M. Massage, reflexology and other manual methods for pain management in labour (Review). Cochrane Database of Systematic Reviews 2018, Issue 3. Art. No: CD009290. DOI: 10.1002/14651858.CD009290.pub3.

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