



Chapter 27

COMFORT MEASURES AND PAIN RELIEF IN LABOUR

Introduction

Every hospital offering obstetrical care should have a variety of non-pharmacologic and pharmacologic methods available to assist the labouring woman with pain control. Professional constant attendance in labour, and/or the presence of a supportive woman has been shown to shorten the time of labour, reduce the need for epidural anaesthesia, lower the incidence of operative intervention, and increase client satisfaction. Pain relief measures should be regarded as bridging mechanisms that allow the woman to effectively progress through labour. Desired pain relief measures should be reviewed and discussed with the patient and her partner on admission and throughout labour as appropriate.

Non-Pharmacologic Comfort Measures

(Will need to be changed and varied as the woman progresses through labour)

1. Body Positions

- ❖ Standing/leaning
- ❖ Walking
- ❖ Hands and knees/kneeling, leaning forward
- ❖ Sitting up/rocking
- ❖ Squatting/supported squat
- ❖ Side lying/semi-reclining

2. Attention – focusing

- ❖ Visual focal point
- ❖ Music, voice, touch
- ❖ Visualization
- ❖ Patterned breathing
- ❖ Chant, song, prayer
- ❖ Relaxation techniques

3. Massage

- ❖ Effleurage
- ❖ Firm sacral pressure
- ❖ Acupressure

4. Hydrotherapy/ heat, cold

- ❖ Bath/whirlpool (may be used with ruptured membranes)
 - water temperature < 37.8° C
 - maintain oral fluid intake
- ❖ Shower (hand held)
- ❖ Hot/cold packs to low back, abdomen, groin

5. Help from Support People

- ❖ Touch
- ❖ Suggestion/verbal reminders
- ❖ Encouragement
- ❖ Compliments
- ❖ Patience/confidence in the woman
- ❖ Immediate response to contractions
- ❖ Individual attention
- ❖ Eye contact

6. Backache Measures

- ❖ Sacral counterpressure
- ❖ Hands and knees position
- ❖ Pelvic rocking
- ❖ Hot/cold pack
- ❖ Showers to back
- ❖ Bathtub/whirlpool
- ❖ 2-handed hip pressure
- ❖ rolling cold pressure (soda can or rolling pin)
- ❖ Subcutaneous sterile H₂O injections

7. Transcutaneous Electrical Nerve Stimulation (TENS)

Pharmacologic Methods of Pain Relief

1. Entonox/Nitronox

- ❖ Self administered
- ❖ May be started early in labour
- ❖ The woman must take deep breaths to open flow valve
- ❖ Takes 45 seconds to raise blood levels
- ❖ Non-cumulative
- ❖ **Must have scavenging unit and be in a well-ventilated room for staff safety**
- ❖ Safe for premature or rapid labour

2. Narcotics

- ❖ May have depressive effect on baby
- ❖ Naloxone Hydrochloride (see NRP manual) should be available
- ❖ PCA pumps
- ❖ Constant infusion of narcotics

3. Epidural (continuous, top-up or PCEA pump)

- ❖ Requires preloading with 500-1000 cc intravenous Ringer's lactate or 0.9% NaCl
- ❖ Close monitoring of the woman's blood pressure after insertion and after each top-up according to your institutions policy.
- ❖ Should be titrated to keep the woman comfortable, but maintain some motor function
- ❖ The woman should be positioned on her side for labour, turned frequently, and not to be left on her back
- ❖ Attention should be paid to:
 - Positioning (pillows)
 - Labour progress
 - Bladder filling
- ❖ The bed rail(s) will need to be up, especially if there is no support person present
- ❖ Routine electronic fetal monitoring is not necessary because an epidural is used
- ❖ Active bearing down efforts need not commence until the presenting part is visible on the perineum
- ❖ The woman need not always assume a lithotomy position for spontaneous birth
- ❖ Great care should be taken when positioning the woman for birth to avoid back injury to herself and support people

Remember, a "good" labour is not necessarily one where an epidural is used, and a "bad" labour is not necessarily 18 hours of back labour, without an epidural. So much depends on the caring attitudes of the health care providers.

Suggested Reading:

1. American Academy of Pediatrics. *Neonatal Resuscitation Textbook*, 4th ed., Heart and Stroke Foundation of Canada, 2000.

2. "Entonox/Nitronox: A Self-Paced Learning Packet", Salvation Army Grace Hospital, Vancouver, B.C.
3. Health Canada. *Family-Centred Maternity and Newborn Care: National Guidelines*, Minister of Public Works and Government Services, Ottawa, 2000.
4. Lena Martenesson and Gunnar Wallin, "Labour pain treated with cutaneous injections of sterile water: a randomized controlled trial", *British Journal of Obstetrics and Gynaecology*, July 1999, Vol 106, pp. 633-637
5. Michel Labrecque et al., "A Randomized Controlled Trial of Nonpharmacologic Approaches for Relief of Low Back Pain During Labour", *The Journal of Family Practice*, Vol 48, No 4, April 1999, pp. 259-263.
6. P. Simkin, *The Birth Partner*, Harvard Common Press, 1989.