University Hospitals Plymouth NHS Trust

MATERNITY GUIDELINES

Pain relief in labour

1. Introduction

Women must be afforded a documented discussion re: pain management in labour that includes all forms of analgesia including regional and general anaesthesia, preferably in the antenatal period. To support this, written information may also be supplied in order to assist them in making an informed choice with regard to pain relief options. Confirmation that an information leaflet has been provided must be documented within the Pregnancy Notes.

2. Natural methods of pain relief

These may include the following:

- Posture, positioning and mobilising
    - These techniques may help to relieve the pain and pressure experienced in labour. Beanbags and birthing balls are available for this purpose on CDS. Evidence shows that encouraging the woman to remain mobile may also assist in the relief of pain.
- Breathing techniques.

    - These can be taught during the antenatal period or during early labour and may help the woman to feel in control of the labour.
- Massage and hydrotherapy.
    - These are useful relaxation tools.
- Hypnobirthing.
    - Women may choose to use self-hypnosis techniques and this may require birth attendants to be respectful of the birth environment.

3. Immersion in water

Women with uncomplicated pregnancies at term should have the option of immersion in water available to them as a method of pain relief. The written documentation of any discussion is essential. Continuous monitoring using the wireless CTG monitor may be used in the water following a documented discussion and associated risk assessment.

4. Pain relief for women admitted in early labour

Please refer to pain ladder (adapted from the Derriford Hospital pain ladder for acute, non-malignant pain) shown in Appendix 1

Women admitted to hospital not in established labour who require pain relief may be given 20 mg Oramorph (as a midwives' Patient Group Directive (PGD) and can be discharged home after 30 minutes if it is clinically safe to do so.

5. Transcutaneous Electrical Nerve Stimulation (TENS / Pulsar)

Women are given instruction in the use of TENS during the antenatal period and should apply it in early labour as it may take an hour to reach maximum effect. Once in use, TENS can be used throughout the labour.
Currently UHP do not supply TENS for use in early labour.

6. Inhalation Analgesia (Entonox)

Patients must be given instruction in the use of entonox before it is self-administered using either a mouthpiece or facial mask.
Entonox has a rapid action, and has few cumulative side effects, which are of short duration. Some women may experience nausea, vomiting, disorientation or hyperventilation.

7. Anaesthetist provision of analgesia

There is a 24 hour, 7 day anaesthetic analgesia service available on central delivery suite (CDS). An anaesthetist should be able to attend within 30 minutes of request however if a further delay is anticipated, refer to the escalation policy (found in Intrapartum guideline: anaesthetic service provision) to request further anaesthetic presence.
Any reason for delay should be clearly documented within the patients notes.

8. Opioids

Diamorphine

- First line opioid available in 5mg or 10mg ampules
- Diamorphine is a midwives' exemption drug and can be administered by midwives without medical prescription up to a maximum of 15 mg.
- If further diamorphine is requested following this, the patient's pain relief requirements must be assessed.
- Guidance should be sought from the obstetric anaesthetist and an epidural should be considered.
- If further diamorphine is required it must be prescribed by a doctor ensuring that the patient is monitored frequently for signs of sedation; this includes frequent monitoring of respirations and saturations.
- Following intramuscular diamorphine, there is no contra-indication to entonox therapy or epidural analgesia using standard fentanyl dosage.

Contraindications:
- Patient allergy
- Imminent delivery

Prescription:
- 5mg -10mg diamorphine IM up to max 15mg.
- No more than 10mg in a 4 hour period

Pethidine

- Pethidine is an alternative to diamorphine during periods when diamorphine supply is low.
- Pethidine is available in 50mg to 100mg ampules
- If Pethidine is given within 1-2 hours of delivery it is known to have a depressant effect on the fetal respiratory system so consideration should be made to have the neonatal team at delivery
- Following intramuscular diamorphine, there is no contra-indication to entonox therapy or epidural analgesia using standard fentanyl dosage

Contraindications:

- Patient allergy
- Imminent delivery

Prescription:
- 50mg -100mg pethidine IM or s/c 1-3 hourly.
- No more than 400mg in a 24 hour period

Pethidine **must not** be given by midwifery staff without a prescription by the doctor. It is not a midwives' exemption or PGD.

Fentanyl PCA

Indications: Epidural contraindicated and other analgesia inadequate

Prescription:
- 50mcg loading bolus (if no prior opiate)
- 20mcg PCA bolus
- 5 min lock out time

Notes:
- Theatre recovery &/or ODP will assist the anaesthetist with preparation
- Necessitates close observation by the midwife regarding maternal signs of sedation.
- Supplemental nasal oxygen should be considered if maternal observations deviate from within normal limits. Continuous pulse oximetry should be considered..
- Risks of maternal and fetal respiratory depression should be discussed
- Anaesthetist may need to reassess requirements as labour progresses and consider increasing bolus doses (with caution)
- Neonatal team should be present at delivery

9. Epidural

Indications	Contraindications	Relative Contraindications
Maternal request Multiple pregnancy Pre-eclampsia/Pregnancy-induced hypertension Cardio-respiratory disease Raised BMI Difficult airway anticipated Obstetric recommendation	Patient refusal Coagulopathy (INR>1.5) Clexane guidance (see section 6) Platelet count <80 or rapidly falling (seek consultant advice) Systemic sepsis/ Localised infection	Hypovolaemia Neurological disease Platelet count 80-100

Consent for neuraxial techniques

- Patients should have the opportunity to read the information card regarding risk (appendix 2)
- Verbal consent should be obtained from the patient and documented

The following additional information should be discussed:

- Takes a minimum 20 minutes to prepare and complete procedure
- Pain relief isn't immediate
- May require top ups, repositioning or re-inserting
- Increased risk of instrumental delivery and perineal trauma

Fasting**:**

- Once epidural sited, oral clear fluids only.

Food is NOT to be given except in exceptional circumstances and following discussion with the anaesthetist.

10. Combined Spinal and Epidural (CSE)

- May be appropriate for patients with severe distress to increase safety
- Helps to avoid pushing against closed cervix and significant fetal caput
- Do a low dose spinal first, then once they are settled, perform epidural

Thromboprophylaxis and neuraxial techniques (according to AAGBI guideline)

Drug	Acceptable time for drug prior to block performance	Acceptable time after block or catheter removal for next drug dose
Heparin (prophylactic dose)	4 hours OR normal APTTR	1 Hour
Heparin (treatment dose)	4 hours OR normal APTTR	4 Hours
LMWH (prophylactic dose)	12 Hours	4 Hours
LMWH (treatment dose)	24 Hours	4 Hours
NSAIDs	No added precautions	No added precautions
Aspirin	No added precautions	No added precautions
Clopidogrel	7 Days	6 Hours
Warfarin	INR 1.4 or less	After catheter removal

Appendix 1. Analgesic pain ladder for use in early labour.

All staff involved in the prescribing, dispensing and administration of controlled drugs must be familiar with the characteristics of the drug

Mild pain

Regular Paracetamol 1g QDS
(no more than 4g in 24hrs)

Moderate pain

Regular Paracetamol
PLUS
PRN Weak opioid

Severe pain

Regular Paracetamol
PLUS
PRN Strong opioid
Oramorph 20-30mg
2 hourly

Opioid equivalence:

10mg oral Morphine equals
3 mg SC Morphine
40mg oral Tramadol
100mg oral Dihydrocodeine
120mg oral Codeine
5mg IM diamorphine equals
10mg IM morphine
25 – 30mg Oramorph

NB: Fentanyl patch 25 mcg/hr = 90mg oral Morphine/ 24 hrs
Only to be used for ongoing chronic pain issues (consultant prescribing only)

Ensure a full pain history is taken from all patients and regular analgesics are prescribed. Be aware of the dose equivalence of opioids prescribed – particular care is needed with opioid patches.

Training requirements

Audit of training needs compliance – please refer to TNA policy

Training needs analysis:
Please refer to 'Training Needs Analysis' guideline together with training attendance database for all staff

Cross references

Antenatal Guideline 31 - Maternity Hand Held Notes, Hospital Records and Record Keeping
Antenatal Guideline 44 – Guideline Development within the Maternity Services
Intrapartum Guideline – Anaesthetic Service Provision
PHNT Obstetric Anaesthetic Guidance 2016 Edition - Dr T Teare, Dr A Fergusson, Dr E Drake and Dr D Thorp-Jones
Guidelines for the management of epidural leg weakness and hypotension (2009). Dr Iain Christie

References

MBRRACE-UK - Saving Lives, Improving Mothers' Care 2017

Cook TM, Counsell D, Wildsmith JAW on behalf of The Royal College of Anaesthetists Third National Audit Project. Major complications of central neuraxial block: report on the Third National Audit Project of the Royal College of Anaesthetists. Br J Anaesth 2009;102 (2):179–190.

Labour Pains Epidural information card. Available at: https://www.labourpains.com/UI/Content/Content.aspx?ID=43

Association of Anaesthetists of Great Britain and Ireland, Obstetric Anaesthetists' Association and Regional Anaesthesia UK. Regional anaesthesia and patients with abnormalities of coagulation. Anaesthesia 2013; 68: pages 966-72. Available at: http://onlinelibrary.wiley.com/doi/10.1111/anae.12359/abstract

AAGBI Management of severe local anaesthetic toxicity (2010) Available at: https://www.aagbi.org/sites/default/files/la_toxicity_2010_0.pdf

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