

# REMIFENTANIL PATIENT CONTROLLED ANALGESIA FOR LABOUR

## DEFINITION

Remifentanyl is an opioid analgesic which acts within 1-2 minutes and can be used by labouring women when administered as intermittent Patient Controlled Analgesia (PCA) boluses. Its metabolism is rapid and usually the effect on the fetus / neonate is negligible.

## BACKGROUND

### INDICATIONS

Remifentanyl PCA is an alternative to pethidine or morphine in women who cannot have an epidural for medical reasons.

It is currently not licensed for use as pain relief in labour via a PCA. It must be prescribed by an anaesthetist (or specialist obstetrician following consultation with an anaesthetist) prior to setting up. Only midwives who have successfully completed CDHB IV certification may administer this infusion.

The woman must give informed consent. She must be informed that Remifentanyl is being used 'off license' and she must be informed of its potential side effects. This will be through the information leaflet and documented discussion with the prescribing medical officer.

## MANAGEMENT

### CRITERIA FOR USE

The woman must be more than 36 weeks' gestation and be in established labour.

It can be used at any gestation in IUFD or for termination of pregnancy, though PCA fentanyl would usually be a more appropriate choice in such a situation.

Continuous one-to-one midwifery care must be available.

Epidural contraindicated for medical reasons.

### CONTRAINDICATIONS

- Allergy to remifentanyl
- Pethidine or morphine administered within the previous 2 hours

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## PATIENT EDUCATION

- Entonox may be safely used in addition to the infusion.
- The woman should be informed of the possible side-effects including drowsiness, pruritis, nausea, dizziness, bradycardia and respiratory depression.
- An information leaflet (Ref.6681) should be provided and the opportunity for discussion given
- The woman should be shown how to use the PCA and should be told to press the button **just before** or **at the start** of a contraction.

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## EQUIPMENT, BAG PREPARATION AND PCA PUMP PREPARATION

See Appendix A

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## OBSERVATIONS

- **Continually** monitor the woman's level of consciousness. A sedation score (*see Appendix B*) and heart rate, blood pressure and respiratory rate is to be recorded every 5 minutes for the initial 30 minutes (and after any additional bolus doses given by an anaesthetist) and then every 30 minutes thereafter.
- CTG monitoring is not required unless otherwise indicated.
- Continuous pulse oximetry. Give oxygen by nasal cannulae if sats under 95% or BMI over 35.
- The Remifentanil PCA Treatment / Observation Chart (Ref. 6688) should be used to record all maternal observations.

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## INDICATIONS FOR CALLING ANAESTHETIST

- A sedation score of 2 or more
- Respiratory rate of less than 8 breaths per minute

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## POINTS OF SAFETY

- **Always** use a **dedicated** cannula i.e. a separate 22 g cannula in addition to the usual 16 g cannula.
- **Always** flush the cannula after the PCA is removed (5 mL 0.9% Sodium chloride).
- Do not give any other drugs via the PCA cannula.
- Only the woman is to use the PCA button. **The PCA button is not to be pressed by midwifery staff or the woman's relatives.**
- The PCA can be used during birth and for perineal repair.
- Neonatal staff attendance at the birth is recommended. Although unlikely, neonatal respiratory depression is still possible.

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## DOCUMENTATION

Remifentanil PCA Treatment/Observation Chart (Ref.6688)

## REFERENCES

1. Patient-controlled intravenous analgesia using remifentanyl in two parturients with twin pregnancies: case report. Gowreesunker P, Roelants F. Acta anaesthesiologica Belgica 2010; 61 (2): 75-8
2. Labor analgesia in preeclampsia: remifentanyl patient controlled intravenous analgesia versus epidural analgesia. El-Kerdawy H, Farouk A. Middle East J Anesthesiol. 2010; 20: 539 -45

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