Guideline

Drug and Alcohol – Analgesia Post Caesarean Birth with Substance Dependence

1. Purpose

This guideline outlines the requirement for analgesic management of pain during labour and post caesarean birth for women with substance dependence or chronic pain issues at the Women's.

2. Definitions

CSE - Combined spinal epidural.

NSAIDs - Non-Steroidal Anti-Inflammatory Drugs.

PCEA - Patient Controlled Epidural Analgesia.

A specific device and analgesia regimen, whereby the patient actuates their own epidural analgesia administration (with suitable safeguards).

WADS - Women's Alcohol and Drug Service.

The WADS is operating at the Royal Women's Hospital as a specialist clinic for pregnant women with drug and alcohol issues.

WADS provides a supportive and consultative service for women with substance dependence throughout the continuum of pregnancy and the postnatal period in conjunction with their home team.

WADS has evolved to become a statewide drug and alcohol service providing clinical services as well as professional support and education programs.

3. Responsibilities

- Anaesthetists – prescribing / administering Regional Anaesthesia. Referral to Acute Pain Service
- Registered Nurses and Midwives
- Staff who are responsible for the care of women with substance dependence or chronic pain are required to follow this guideline.

Refer to the following Policies, Guidelines and Procedures:

- Analgesic Management of Acute Pain
- Epidural Management
- Patient Controlled Analgesia (PCA)
- Ketamine Infusion.

4. Guideline

4.1 Antenatal preparation

Women with a history of significant substance abuse or chronic pain should be referred to the Anaesthetic Antenatal Clinic (AAC) for review and discussion of possible future anaesthesia and analgesic options intrapartum and post-partum. This should occur in the third trimester of pregnancy.

Three main groups are identified:

1. Women who are using heroin or prescription opioids in doses or manners that are not clinically indicated
2. Women on buprenorphine or methadone for opioid replacement therapy
3. Women with a history of chronic pain with high analgesic requirements.

These women often have complex combinations of illicit substance abuse and or psychiatric co morbidities that could make discussion in an emergency setting difficult. Discussion relating to venous access is also recommended.

For women requiring a caesarean birth there is a range of options for post-operative analgesia. Women with a history of chronic pain or regular opioid use or opioid substitution with buprenorphine or methadone, require

special consideration when meeting their post-operative analgesic requirements.

Buprenorphine is a partial opioid agonist and antagonist. It exerts a degree of blockade on the effects of a full opioid agonist (e.g. morphine) which may complicate the use of opioids for analgesia postoperatively. It is recommended to treat women on buprenorphine on a case by case basis. Any changes to buprenorphine doses or management should be made only by the WADS team. Ideally pregnant women on buprenorphine should be converted to methadone during their pregnancy. (Refer to the guideline: Drug and Alcohol - Methadone Stabilisation in Pregnancy).

Methadone is a long acting opioid agonist. It is recommended to continue administration at the usual dose. Achieving ideal post-operative pain relief in patients using methadone is a challenge due to their opioid tolerance levels.

As women with substance dependence often require higher doses of opioids after caesarean birth, they are at risk of developing delayed respiratory depression. Therefore the post-operative analgesic requirements of women with substance dependence after caesarean birth need to be individualised. A range of medications are available but individual responses vary.

4.2 Medicines - Analgesia

Labour

In the high-risk groups identified above, an **epidural** should be offered early in labour for analgesia.

Patient Controlled Epidural Analgesia (PCEA) to be left in situ if no contraindication on the postnatal wards for up to 3 days. This should be supplemented with Adjunct analgesia.

Caesarean birth

Regional analgesia

For an elective caesarean birth a **combined spinal epidural (CSE)** technique should be considered to allow the option of epidural analgesia postoperatively.

For an emergency caesarean birth, a CSE should be considered unless an epidural has already been inserted during labour.

General Anaesthesia - Non regional analgesia

- Ketamine Infusion
- Patient Controlled Analgesia (PCA).

If regional anaesthesia is inappropriate or refused, a ketamine infusion should be run intravenously in addition to the multimodal analgesia outlined below. Opioid requirements should be individualised, depending upon the use of other medications such as Methadone and the Buprenorphine patch.

Post Caesarean birth

- Epidural
- PCA
- Transversus abdominis plane (TAP) blocks.

TAP blocks should be considered in these women either as a single shot technique or a catheter technique regardless of whether general or regional anaesthesia was used.

Adjunct Analgesia

Ketamine Infusion

Refer to the procedure Ketamine Infusion.

200mg in 50mL Sodium chloride 0.9%.

0.1 to 0.2mg/kg bolus and then run at 0.1 to 0.2 mg/kg/hr, in consultation with the Acute Pain Service.

Tramadol

Tramadol 50-100mg QID PRN if pain is not controlled.

Caution: Consider with antidepressants and other medicines that may contribute to serotonin syndrome toxicity.

If additional analgesics are required, consult with Acute Pain Service or Anaesthetist.

Multi Modal Analgesia

- Paracetamol
- Non-steroidal anti-inflammatory drugs (NSAIDs) – Ibuprofen.

Note: Liver function tests (LFTs) should be taken into consideration when ordering medicines where patients have a history of hepatitis C, of infective hepatitis, chemically induced hepatitis or cholestasis in addition to full blood examination if there is concern of thrombocytopenia.

4.3 Observations

Refer to the Policies, Guidelines and Procedures:

- Observations - General
- Sedation Score Assessment Guideline
- Pain Score Assessment Guideline
- Ketamine Infusion
- Epidural Management
- Patient Controlled Analgesia.

The anaesthetic registrar must be contacted in the above instances and will decide whether the patient can be nursed on the ward or require admission to the Complex Care Unit.

4.4 Breastfeeding post caesarean birth: Caution

Midwives need to remain aware of the risks of drowsiness for the mother especially in the first 24 hours Refer to the Women's guideline: Safe Sleeping for Infants with their Mothers in the Postnatal Wards.

As with the safe sleeping guideline, the midwife must:

1. Conduct a full assessment of the mother's level of consciousness and safety for each breastfeed
2. Advise the mother not to breastfeed her baby without a midwife in attendance if:
    - she is tired to a point where she would find it difficult to respond to her baby
    - she has any condition which affects consciousness e.g. significant blood loss, epilepsy, high temperature, drug use.
3. Ensure that the bed is lowered to its minimum height
4. Help the mother position the infant
5. Check on the mother and baby during the progression of the feed. Ask the mother to use call bell for assistance during the breastfeed
6. Ensure that the call bell is within the mother's reach.

4.5 Additional considerations

Patients on buprenorphine who have a contraindication to epidural analgesia will require intravenous opioids either by infusion and/or patient controlled analgesia and may require closer observations than women on methadone.

Gabapentin and Pregabalin should be considered on an individual basis after balancing the risks and benefits of their use. This is particularly important in the setting of breastfeeding given these are Category 3 drugs in pregnancy and are excreted in breast milk and can cause neonatal sedation.

5. Evaluation, monitoring and reporting of compliance to this guideline

Compliance to this guideline will be monitored, evaluated and reported through review of incidents raised at the Medication Safety Committee and the Adverse Drug Reaction Committee.

Annual auditing of medicines charts and observation charts will also be co-ordinated by the Acute Pain Service. These results will be reported to the Department of anaesthesia as well as the appropriate Heads of Units.

6. References

1. Australian & New Zealand College of Anaesthetists and Faculty of Pain Medicine, Acute Pain Management: Scientific Evidence, 3nd ed. 2010
2. Australian Government Department of Health and Ageing. Intergovernmental Committee on Drugs (IGCD) sub-committee, Methadone and Other Treatments. National Clinical Guidelines and Procedures for the use of Buprenorphine in the treatment of Heroin Dependence. http://www.health.gov.au/internet/drugstrategy/publishing.nsf/Content/buprenorphine-guide accessed 21/2/2013
3. Australian Medicines Handbook, https://shop.amh.net.au/ accessed 21/2/2013
4. NSW Department of Health, Background papers to the national clinical guidelines for the management of drug use during pregnancy, birth & the early development years of the newborn. June 2006 http://www.health.nsw.gov.au/pubs/2006/bkg_pregnancy.html accessed 21/2/2013

The Women's Policies, Guideline and Procedures:

5. Guideline: Drug and Alcohol – Alcohol Withdrawal Management
6. Guideline: Drug and Alcohol – Methadone Stabilisation in Pregnancy
7. Guideline: Referral to the Women's Alcohol and Drug Service (WADS) Procedure
8. Anesthetics Handbook (intranet)
9. The Women's Alcohol and Drug Service (intranet).

7. Legislation/Regulations related to this guideline

Not applicable.

8. Appendices

Not applicable.