Guideline

Drug and Alcohol - Methadone Stabilisation in Pregnancy

1. Purpose

This document outlines the clinical guideline details to

- assist staff to care for women admitted to hospital for methadone stabilisation in pregnancy and to engage the woman in a continuing therapeutic relationship,
- minimise opioid seeking behavior,
- reduce the incidence of pre-term birth and stabilise foetal opioid exposure,
- initiate or to progress psychosocial care,
- assess co-morbidities and to initiate appropriate care at the Women's.

For methadone stabilization[1,2] to be effective, psychosocial counselling and support should be provided[3] concurrently.

2. Definitions

Methadone Stabilization is the therapeutic transfer of a person from dependent but intermittent opioid use to prescribed methadone.

The terms "narcotic" and "opioid" appear to be synonymous in MeSH[4] and ICD-10[5] medical terminologies, except that the term "opioid analgesia" is preferred.

3. Responsibilities

At the Royal Women's Hospital, Methadone Stabilisation of Inpatients is arranged by the Women's Alcohol and Drug Service (WADS) and prescribed by the WADS obstetrician (for further details see appendix 1).

Key personnel include Midwives, Social Workers, Pharmacists, Psychiatrists, Paediatricians, Obstetricians and others.

4. Guideline

4.1. Assessment:

- Arrange Psychosocial Assessment if this has not already been done.
- Contact Medicare Australia prescription shopping service for details of recently prescribed medicines such as benzodiazepines analgesics and psychotropics. (This is normally done by the WADS obstetrician,see appendix 1).
- Assess for medical (blood-borne virus, hepatic or cardiac dysfunction, dental), mental health and pregnancy related comorbidities[2].
- Assess the fetus with appropriate monitoring.
  Be aware that methadone or buprenorphine administration alters the fetal activity and heart rate.
  Drug and Alcohol - Neonatal Abstinence Syndrome (NAS) may occur in the neonate of a mother who has been treated with methadone or buprenorphine in pregnancy.

4.2. Who should be offered treatment?

- Women who have withdrawal symptoms if opioids are discontinued.
- Women who have received information and counselling, who want treatment and who agree to abide by the Royal Women's Hospital code of behaviour.
- Those who are not allergic to methadone.

4.3. Admission planning

- Buprenorphine may be prescribed by the WADS obstetrician instead of methadone if the woman is allergic to methadone or declines methadone treatment. There is no evidence that breast feeding on buprenorphine causes harm to the neonate (see section 4.10).
- Prior to admission the woman is informed that the process of methadone stabilisation will take five days[7] and is usually done Monday to Friday when all WADS support staff are available.
- The WADS Midwife or Team Care Midwife should discuss and provide the woman with written information about substance use and its possible effects on the pregnancy, birth, infant feeding, safe sleeping and other relevant issues[8].
- Referral to the Dietitian should be arranged during the admission to enable nutrition assessment, to provide nutrition education, food service extras and to manage constipation, eating disorders or other disorders of nutrition.
- If required, arrange outpatient Mental Health assessment[9,2] *after* methadone stabilisation has been completed, by faxing the request for Consultation to the Women's Mental Health Service.

4.4. Methadone induction

- For prescribing Methadone see appendix 1.
- The initial dose should be 20 mg methadone[9, 7] and subsequent doses of 5-10mg are given at four hourly intervals or earlier if indicated. The Opiate Withdrawal Scale should be used two hourly. Scores of 4 or more should be notified to the WADS consultant on call.
  The daily dose prescribed is based on the total dose given in the preceding 24 hours and the response to treatment.
- Advise the woman that optimising the methadone dose greatly reduces the chance of preterm birth.
- The woman should remain on the Ward for 30-60 minutes after dosing.
- Ask the woman to request that staff contact the WADS obstetrician promptly if supplementary dosing is needed. Use the opiate withdrawal scale to assess for specific symptoms of opiate withdrawal.
- Initially the amount and the rate of dose increases are judged according to the amount of opioid or if opioid analgesic being used prior to methadone induction.
- At each review symptoms of nausea, agitation or sweatiness and dilatation of the pupils are checked. Use the Opiate Withdrawal Scale to assess these symptoms.
- Due to the prolonged action of methadone, doses over 50mg during the first 24 hours should be avoided to prevent oversedation[9,10], unless the prior narcotic dose was very large and discontinuation of treatment because of severe withdrawal symptoms is anticipated.
- Considerable care should be exercised to avoid overdosing with methadone if the woman may also be self medicating. This should be considered if she has left the ward without explanation or has had visitors who may have supplied non-prescribed substances.
- If the woman is a polysubstance user and is experiencing cannabis withdrawal, then treatment with diazepam[10,2], may be required concurrently. This should only be ordered by the WADS obstetrician.
- Analgesics during methadone stabilisation should only be ordered by the WADS obstetrician, except for analgesics during labour and analgesics after Caesarean birth (see Drug and Alcohol – Analgesia Post Caesarean birth for Women with Substance Dependence)
- The rate of methadone dose increase should be sufficient to relieve opioid craving, agitation, nausea or upper respiratory symptoms, otherwise the woman may discontinue treatment.

- Half hourly observations including pulse oximetry should be commenced if oversedation occurs, until fully alert. Withhold further methadone until this occurs. Transfer to a High-Dependency facility if indicated.
- The time of dosing is adjusted to be within normal commercial pharmacy opening hours.
- See section 4.10 for Buprenorphine induction.

4.5. Methadone stabilization

- For most women, daily methadone dosing is appropriate[2], once Induction has been completed.
- As pregnancy advances, the dose of methadone required to avoid symptoms of withdrawal will need to be increased.
- Women who are already stabilised on buprenorphine/naloxone (Suboxone®)[11] should be advised to change to methadone, or to buprenorphine alone if this advice is not accepted.
- After delivery the methadone dose usually remains unchanged.
  If sedation occurs the methadone dose is reduced by 5 mg. Further reductions are normally arranged by the community Prescriber during the next few months.

4.6. Preventing and managing relapse

- Watch for poor clinic attendance and check for symptoms of opioid withdrawal.
  If these are observed, recommend an increase in the methadone dose.
- Continuation or resumption of narcotic use may be due to social/relationship pressures, which are best dealt with by counselling and support, not by changing the methadone dose.
- If three doses of methadone are missed, the woman may require readmission for methadone stabilization[2].

4.7. Methadone dosing in labor and immediately after the birth

- Methadone dosing should continue without interruption.
- Post-partum analgesia with paracetamol, tramadol and diclofenac may be used.
- Post-Caesarean analgesia is given according to the Clinical Guideline (see Drug and Alcohol – Analgesia Post Caesarean birth for Women with Substance Dependence).
- If the woman has not had any antenatal care and is an opioid user who accepts the advice to commence methadone stabilisation, referral to WADS is arranged using the Internal Referral form and by contacting the WADS clinician.
  It is better to commence dosing after delivery of the baby.

4.8. Breast feeding

- Methadone stabilization is not a contra-indication to breast feeding.

4.9. Discharge planning

- If narcotic analgesia is being considered, please discuss this with the WADS obstetrician.
- A Prescribing Service or Prescriber is chosen appropriate to the clinical complexity, which is as close as possible to the woman's place of living.
  Agreement is reached that the woman will be accepted as a patient, and a Discharge Summary (see Drug and Alcohol – Analgesia Post Caesarean birth for Women with Substance Dependence) giving the dose and frequency of all medicines is faxed to the new Prescriber.
- The General Practitioner is contacted to request that no psychoactive medicines such as benzodiazepines are to be prescribed as these will be managed by the Prescribing Service.

- A Dispensing Pharmacy is chosen which is as close as possible to the woman's place of living.
  An Identity Certified Passport Photograph of the woman and an interim prescription is provided to cover the gap between leaving hospital and seeing the new Prescriber.
- The WADS clinician will make an appointment for the woman to be followed up in the WADS outpatient clinic.

4.10. Buprenorphine stabilisation in pregnancy

Buprenorphine stabilisation[3, 6] in pregnancy is arranged by the Women's Alcohol & Drug Service after appropriate referral (appendix 1 for futher details).
Maintenance doses of buprenorphine may be prescribed by Team medical officers[12] (see appendix 1 for futher details)

Admission to hospital, provision of information, psychosocial support[6], antenatal care and postnatal care are offered in a similar way to that which is provided to a woman who is to receive methadone pharmacotherapy.

Methadone pharmacotherapy remains the recommended treatment[13] for most women with opioid dependency in pregnancy.

The safety[14] of buprenorphine in pregnancy and lactation is discussed prior to obtaining consent to start treatment. Refer to Pregnancy and Breastfeeding Medicines Guide, RWH.

If the woman for buprenorphine stabilization is in labor, buprenorphine dosing is deferred until after the birth.

Dosing should be delayed until opioid withdrawal symptoms commence, as buprenorphine may induce rapid opioid withdrawal. This should be discussed before treatment is commenced.
Dosing in pregnancy is 24 hourly[14] and the buprenorphine tablets are crushed (not powdered) and given sublingually under supervision.

Other side effects of buprenorphine are similar to those of other opioids.

Buprenorphine has a 24 - 72 hour duration of action.

Caution

must be exercised[14] if:

- poly drug use is suspected,
- continued opioid use is suspected,
- recent head injury has occurred,
- respiratory compromise is evident,
- if there is an acute abdomen,
- severe hepatic disease,
- acute Mental Health condition,
- chronic pain,
- Post-Caesarean analgesia: per Clinical Practice Guideline (see Drug and Alcohol – Analgesia Post Caesarean birth for Women with Substance Dependence)

Notes:

- Ketoconazole, nifedipine and macrolide antibiotics may potentiate the action of buprenorphine,
- Monilial retinitis with visual impairment may be caused if the woman injects buprenorphine which has not prescribed for her.

If transfer from methadone maintenance is being considered, explain that precipitated withdrawal may occur

and that transfer from methadone to buprenorphine is most effective if the dose of methadone is less than 100mg. In most circumetances, transfer should occur as an inpatient.

Dose titration for buprenorphine:

Look for features of opioid intoxication and consider:

- cravings for heroin
- consider the possibility of use of other substances especially codeine oxycodone and benzodiazepines side-effects
- adherence to dosing regimen and compliance with staff requests
- the woman's satisfaction with buprenorphine treatment.

When buprenorphine stabilization is to be commenced, the starting dose should be 4mg[14], unless there has been prior evidence of buprenorphine or other opioid sensitivity.

Dose increments[14] for buprenorphine:

- if below 16 mg buprenorphine dose changes of 2-4 mg
- if above 16 mg buprenorphine dose changes of 4-8 mg are appropriate.
- the effective dose range of buprenorphine is usually 12-24 mg per day.

If buprenorphine 32mg is insufficient to control narcotic withdrawal symptoms, methadone treatment may be required.

Postnatal care

If a woman is not breastfeeding, buprenorphine-naloxone sublingual tablets or buprenorphine-naloxone film in an appropriate dose may be recommended [15] to her Prescriber when she is discharged from hospital.

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

Compliance with this guideline will be monitored, evaluated and reported through a review of incidents, annual audit and other internal reviews achieved through staff meetings

6. References

AUTHOR	TITLE	SOURCE	LEVEL OF EVIDENCE
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2 Ministerial Council on Drug Safety	National Clinical Guidelines for the Management of Drug Use during Pregnancy, Birth and the Early Development Years of the Newborn, 2006.	http://www.health.nsw.gov.au/pubs/2006/ncg_druguse.html	II
3 Amato L. et al.	Psychosocial and pharmacological treatments versus pharmacological treatments for opioid detoxification.	Cochrane Database. DOI: 10.1002/14651858.CD005031.pub4 Published Online: 7 SEP 2011.	I
4	*Medical* Subject Headings: the National Library of *Medicine controlled vocabulary*	http://www.ncbi.nlm.nih.gov/mesh	

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14 Lintzeris N et al.	National Clinical Guidelines and Procedures for the Use of Buprenorphine in the Treatment of Opioid Dependence 2006 p64-67.	http://www.health.vic.gov.au/dpu/downloads/guidelines-buprenorphine.pdf	III

15	Buprenorphine film listing information;	http://pbs.gov.au/medicine/item/6470M-9749D-6471N-9750E	IV
16 Ministerial Council on Drug Strategy	The National Drug Strategy 2010-2015	http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/publishing.nsf/Content/DB4076D49F13309FCA257854007BAF30/$File/nds2015.pdf	II
17	A new blueprint for alcohol and other drug treatment services 2009 - 2013.	Department of Human Services, Melbourne, Victoria 2008 http://docs.health.vic.gov.au/docs/doc/9228A36CB98A6417CA2578A10013A10E/$FILE/blueprint09-13.pdf	II

7. Legislation related to this guideline

- National Drug Strategy 2010-2015[16] and the Victorian blueprint for alcohol and other drug treatment services 2009 – 2013[17].
- Medicare Australia prescription shopping service, Phone 1800 631 181

Conflict of Interest

The leading author states that no conflict of interest influenced the preparation of this Clinical Guideline.

8. Appendices

Appendix 1: Methadone and Buprenorphine Treatment Pathway

Methadone and Buprenorphine Treatment Pathway

Inpatient pathway

Is the patient on methadone or buprenorphine program?

YES — Requires stabilisation?? — NO

Business Hours

- Contact ward pharmacist (blue/yellow pharmacist pager:53183 or red/green pharmacist pager: 53186) who will verify the dosage and timing of the last dose given
- Pharmacist to document in patient's history

After Hours

Prescriber to contact patient's community pharmacy to verify:

- Date, time and dose last given
- Any takeaway dose(s) provided
- Inform pharmacy whether patient is to be admitted and dosed from RWH

Prescriber to document in patient's history
Takeaway dose(s) MUST be locked in DD safe for discard by pharmacist

Dosage →

All Hours

Contact WADS Consultant on call regarding initiation or stabilisation of methadone or

Prescriber to:

- Prescribe the methadone or buprenorphine order on the patient's inpatient medicines chart
- Complete and submit the online form - Notification of Drug Dependent Person, from the Drug and Poisons Unit of Department of Human Services website: http://www.health.vic.gov.au/dpu/smartforms.htm,

Business Hours

- Pharmacist will notify patient's regular methadone or buprenorphine prescriber and community pharmacy, informing them of the admission to RWH
- For women commencing on program and any dosage changes must be prescribed by WADS obstetrician

After Hours

- Nursing/midwifery staff to contact obstetric pharmaciston the next working day to notify the pharmacist of the patient's admission.

PATIENT FOR DISCHARGE

Business Hours

Notify ward pharmacist who will inform patient's community pharmacy and regular prescriber of:

- Discharge of patient
- Methadone or buprenorphine dosage on discharge
- When next dose is due

Pharmacist to document in patient's history

This notification is critical if dosage has been changed

After Hours

- Nursing/midwifery staff or prescriber to contact patient's community pharmacy to notify:
  - methadone or buprenorphine dosage
  - when next dose is due
- Nursingmidwifery staff or prescriber to document in patient's history
- Nursing/midwifery staff to notify obstetric pharmacist as soon as possible or on the next working day

Outpatient pathway

- As a routine, RWH does not administer methadone or buprenorphine to outpatients
- Admission for Methadone stabilization should be arranged by contacting WADS staff.

General Information:

Please inform WADS when admitting a WADS (Women's Alcohol and Drug Service) patient, , and contact WADS obstetrician for complex drug and alcohol related issues. On-call WADS obstetrician can be contacted via switch

For medical staff who are not registered methadone or buprenorphine prescribers, any adjustments to the methadone or buprenorphine dosage must be discussed with WADS obstetrician.

For patients who are currently on methadone/buprenorphine, initiation of any of the following should be **in discussion with WADS obstetrician**:

- **Benzodiazepines** eg. diazepam, oxazepam, temazepam, alprazolam, nitrazepam
- **Codeine-containing medicines** eg. Panadeine®, Panadeine Forte®
- **Antipsychotics** eg. chlorpromazine, lithium, risperidone
- **Opioids** eg. oxycodone, morphine, fentanyl, pethidine, tramadol

These medicines will potentiate the effects of methadone and buprenorphine with possible harmful consequences. Pain relief for these women should not be withheld, but narcotics need to be used with care. As buprenorphine is a partial opiate agonist, analgesia with other opiates is not effective.