SUPPORTING WOMEN USING OPIATES IN PREGNANCY: 
A Guideline for Primary Care Providers 
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INTRODUCTION

Prevalence of Opiate Use and Impact on Maternal, Fetal, and Neonatal Health:

The prevalence of opiate use among pregnant women ranges from 1% to 21% (Brown, 1998). These women experience a six-fold increase in maternal obstetric complications such as low birth weight, preeclampsia, and third trimester bleeding. Neonatal complications include narcotic withdrawal, postnatal growth deficiency, increased neonatal mortality, and a 74-fold increase in sudden infant death syndrome (Minozzi et al, 2009).

Treatment Options:

Since the early 1970s, treatment with methadone has been the standard of care for pregnant women addicted to opiates (Minozzi et al, 2009). Despite its ability to induce fetal dependence and withdrawal, maintenance treatment provides a steady concentration of opiate in the pregnant woman’s blood and so prevents the adverse effects on the fetus of repeated withdrawals (Jarvis, 1994). Methadone maintenance during pregnancy has been shown to reduce maternal illicit opiate use, enhance compliance with obstetrical care, and improve neonatal outcomes such as birth weight (Health Canada, 2008). In recent years, buprenorphine maintenance therapy during pregnancy has also shown safety and efficacy for both mother and fetus, and has risen as an alternative for the treatment of opioid dependence in pregnancy (Winklbaur et al, 2008).

Barriers to Treatment:

Unfortunately, in rural or remote communities, people who are dependent on opioids may have absent or limited access to methadone or buprenorphine maintenance treatment. Potential obstacles include a lack of local physicians authorized to prescribe these drugs, a lack of community pharmacists to dispense them, a lack of substance use treatment services, a lack of anonymity in local service settings, and difficulties obtaining or covering the cost of transportation to services located elsewhere (Health Canada, 2008). Depending on the resources available in the community, it may be difficult to provide a comprehensive approach to treatment, with access to the full range of services and supports that patients may need (Health Canada, 2008). Practitioners may also lack access to information and supports. In Ontario, although methadone spots have increased, the numbers have not kept up with the prescription opioid addiction epidemic. Some communities have no methadone providers, and others have long waiting lists. The options are further limited by guidelines about carries that can prevent patients from
accessing treatment if applied rigidly. For instance, in Ontario some communities do not have pharmacies that are open on Sunday, yet the CPSO requires seven days per week dispensing for at least two months.

**Alternative Treatment:**

One way to alleviate such entrenched obstacles may be to allow health care providers to prescribe long-acting morphine as maintenance treatment for pregnant opiate-dependent women. In 2009, a review was done by the Cochrane Collaboration to assess the effectiveness of any opioid agonist maintenance treatment alone or in combination with psychosocial intervention compared to no intervention, other pharmacological intervention or psychosocial interventions on child health status, neonatal mortality, retaining pregnant women in treatment, and reducing the use of substances. The review found few differences in newborn or maternal outcomes for pregnant opiate-dependent women who were maintained on methadone, buprenorphine, or oral slow release morphine (Minozzi et al, 2009).

**PHILOSOPHY**

Care of pregnant women dependent on opioids will be woman-centred, recognizing that women have choice and autonomy in the decision-making process when it comes to their health. Interventions will be matched to the woman’s stage of change and implemented only with her informed consent.

**GUIDELINES: Treatment of Opioid-Dependence in Pregnancy with Long-Acting Morphine Maintenance Therapy**

**Indications for treatment:**
- Confirmed intrauterine pregnancy
- Opioid use (a urine drug screen that is positive for opioids and verifies the patient’s history)
- Physical dependence (as evidenced by symptoms or signs of opioid withdrawal)
- Psychological dependence (regular daily use, social consequences, physical consequences, inability to discontinue use, neglect of responsibilities, preoccupation with the drug)
- Methadone or buprenorphine not available or not feasible

**Treatment Timeline:**
- Induction period – 7 to 10 days.
- Maintenance period – from induction to the post-partum period.

**Treatment Setting:**
- Induction period – Inpatient setting allows more rapid and safer titration.
• Maintenance period – Community and clinic setting.

*Treatment Goals:*

- Relieve withdrawal symptoms
- Avoid sedation
- Prevent complications of withdrawal (miscarriage, preterm labor, fetal distress, etc.)

*Initial Patient Assessment*

Initial patient assessment involves a history and brief physical examination, urine drug screening and other investigations, and a discussion and review of treatment options.

- **History (in addition to a general medical history):**
  - Pattern of use of all major drug classes
  - Addiction treatment history and response
  - High-risk behaviour (such as needle sharing)
  - Psychiatric history
  - Social situation
  - Details of chronic or recurrent pain

- **Focused Physical Examination (in addition to obstetric examination):**
  - Signs of opioid intoxication or withdrawal
  - Signs of liver disease
  - Cardiovascular system
  - Respiratory system
  - Malnutrition
  - Needle tracks and abscesses

- **Initial Urine Drug Screen:**
  - If negative – Physician should conduct more thorough assessment to confirm a diagnosis of opioid dependence.
  - If positive for non-methadone opioid – Physician may initiate morphine protocol.
  - If positive for methadone or methadone metabolite – Physician should document the patient’s history of methadone use.

- **Other Tests (in addition to antenatal bloodwork and imaging):**
  - HIV, hepatitis B, and hepatitis C serology

- **Treatment Agreement:**
  - Should include patient and provider roles and responsibilities

*Induction and Maintenance Dosing:*

*Induction:*

A) If the daily dose is relatively constant:
1. Convert to equivalent dose of morphine
2. Reduce equivalent dose of morphine by 50% (due to incomplete cross-tolerance when switching to a new opioid)
3. Divide in 3-4 scheduled doses of immediate-release morphine
4. Add 3 PRN doses (30-50% of scheduled dose)

**B) If no constant daily dose (i.e. variable daily dose depending on availability):**
   - Start with smaller dose (e.g. 15 mg IR morphine TID with 5 mg TID PRN)

*Example:*

Patient takes Oxycontin 80 mg BID = 160 mg oxycodone/day
Morphine equivalent dose = 240 mg/day (1.5 x)
50% morphine equivalent = 120 mg/day = 40 mg TID of IR morphine
Add 15 mg TID for withdrawal symptoms

Next day’s dose:
Add scheduled + PRN doses used the previous day
E.g. 40 mg TID + 15 mg TID PRN = 165 mg IR morphine
Schedule in divided doses of approximately 55 mg TID
Add 15 mg TID PRN

Repeat for 3rd day’s dose.

**C) Dispensing and other considerations:**
   - All doses should be witnessed
   - Dose should be held if patient is drowsy, even if patient requests it
   - No visitors and no passes should be allowed if possible (high risk of drug use)
   - No sedatives should be administered
   - COWS assessment should be done prior to each PRN dose to document need for dose

**D) Once optimal dose is reached:**
   - Convert daily immediate-release morphine dose to equivalent controlled-release dose (Possible controlled release formulations are MS Contin and Kadian)
   - Advantage of Kadian: once daily administration

**Maintenance:**

In addition to antenatal visits, patients on morphine maintenance therapy should be seen weekly for the first 4-6 weeks of treatment, and more frequently if necessary. Once stabilized, after 4-6 weeks of treatment, patients should be seen at least once monthly.
Point-of-care urine drug screens should be done 1-3 times per month, or more frequently as per the physician’s discretion for the following reasons:
  o Adjusting the dose
  o For contingency management with patients who continue to use drugs
  o For contingency management with patients who have achieved abstinence

**Counseling and Case Management:**

Counseling enhances treatment retention, decreases patients’ use of illegal opioids and other substances, and improves patients’ overall functioning in terms of criminality, homelessness, mental health, vocational and educational involvement (Health Canada, 2002). It is recommended that psychosocial treatment be provided in addition to agonist maintenance treatment to pregnant women dependent on opioids.
References


