Methadone and Pregnancy
Methadone/Buprenorphine 101 Workshop, April 1, 2017

Charissa Patricelli, MD, CCFP, ABAM
Clinical Associate Professor, Dept. of Family Practice UBC
American Board of Addiction Medicine Certified

Original prepared by Launette Rieb, MD MSc, CCFP, FCFP
Clinical Associate Professor, Dept. Family Practice UBC
American Board of Addiction Medicine Certified
Overview

- Opioids, fertility and pregnancy
- Heroin in pregnancy
- Methadone in pregnancy
- Perinatal methadone management
- Counselling and follow-up
Opioids and fertility

Opioid use can interfere with fertility

- Heroin—60–90% menstrual irregularities
- Methadone—majority resume regular menses by six to 12 months
- Beware of undiagnosed pregnancy
- Always do BHCG with first UDS, then PRN
- Provide contraception options
Opioids and pregnancy

Opioids are not physical teratogens
• This includes:
  – natural opioids
    • opium, morphine, codeine
  – semi-synthetics
    • heroin, hydromorphone
  – synthetics
    • methadone, fentanyl, oxycodone

But heroin can be “cut” with teratogens
• quinine, cocaine, amphetamine, etc.
Opioids and pregnancy

- Opioid use is not what endangers *in utero*
- Opioid *withdrawal* endangers the fetus
- Also, illicit opioid use with all the associated risks endangers the fetus
Disadvantages of heroin in pregnancy

- Withdrawal produces noradrenalin release
- Increased abruption, abort/miscarriage
- Increased premature labour/infant
- Increased IUGR
- Decreased birth weight + head circumference
- Increased NAS + SIDS + feeding problems
Disadvantages of heroin in pregnancy

• Illegal activity, sex trade, needle use
• STDs, TB, endocarditis, UTIs, sepsis
• Viremia — HIV, HAV, HBV, HCV
• Maternal mortality
• Family disruption
Advantages of methadone in pregnancy

Fetal/newborn advantages

• Stops withdrawal cycle
• Decreased prematurity rates
• Increased birth weight + head circumference
• Decreased infant mortality
• Better prenatal care and nutrition
• Babies have normal milestones by 18 months
Advantages of methadone in pregnancy

Maternal advantages for methadone

- Decreased sex trade, needle use
- Decreased infections — STDs, viral, bacteria
- Decreased maternal mortality
- Engagement in recovery training
- Increased family cohesion and/or choice
Disadvantages of methadone

Maternal disadvantages
• sweating, constipation, libido, sleep, nausea

Infant disadvantages
• increased risk of more prolonged and pronounced NAS, increased risk of SIDS
Perinatal methadone management

If on heroin—convert to methadone (or buprenorphine)

- Conversion in hospital is recommended – faster, and other tests can be done at the same time
- Integrated care and discharge planning are vital to success
- **Contraindicated:** clonidine, naloxone, naltrexone, pentazocine, nalbuphine, butorphanol
- Many women are most stable if maintained on methadone through delivery and six months+ postpartum
Perinatal methadone management

• In second and third trimester, pregnant women have increased weight and blood volume and may need:
  – increase dose once daily

• Or become rapid metabolizers – thus may need:
  – split dose according to symptoms

• To achieve the same methadone blood level, one patient may need 20 mg, another 120 mg
Methadone tapering

• The best dose is the lowest dose that keeps a woman out of withdrawal
• If she wants to taper off - explore reasons: insufficient/false information, fear of social services, partner pressure, etc.
• Explain that with tapering, risk of relapse is high—and with it, child apprehension
• Even so tapering is possible…
Methadone tapering

- Very slow methadone taper in pregnancy recommended only if in stable recovery
- Outpatient: Taper methadone by 1–2 mg on any given day, and not more than 2–5 mg/week
- In-patient: Can taper 1–2 mg/day, RNs monitor
- Stop if signs or symptoms of withdrawal
- Monitor pregnancy: SFH, U/S, +/- NSTs
- Increase frequency of visits and UDSs
- Ideal if addictions and perinatal care is provided together
Intrapartum methadone management

In labour

- Continue methadone
- Avoid fentanyl, cannot give Narcan to baby due to seizure risk
- Offer entonox or epidural if appropriate

Postpartum

- May gradually lower methadone dose, administer once daily

Neonate

- Observe for NAS, prescribe morphine if needed
MOTHER study

- Compared methadone to buprenorphine perinatally and observed infant outcomes – RCT
- Buprenorphine and methadone were safe and effective in pregnancy and for the infant
- Buprenorphine use led to less morphine needed to treat baby (though same peak NAS scoring) and shorter length of stay in hospital
- Methadone provided greater retention in treatment (more dropped out of the buprenorphine group – largely dropouts were methadone pts switched to buprenorphine for the study; those switched from heroin to buprenorphine did as well as methadone patients)
- Methadone is still gold standard – do not change a pregnant patient from methadone to buprenorphine; however if she is on heroin (or other opioid) you can offer her the choice (buprenorphine vs. methadone), beware precipitated withdrawal
- If patient is on Suboxone when she gets pregnant, change to pure buprenorphine (special access needed)
Rooming-in

If possible and baby and mom are stable
- Rooming-in decreases withdrawal
- Increases bonding, increases breastfeeding rates
- Increases mom’s ability to care for baby
- Decreases hospitalization time (likely cost)

Breastfeeding
- Not contraindicated with methadone
- Is contraindicated if HIV+, or active drug use
Probability Methadone/Morphine Tx
JOGC May 2012

Predicted Probability of infant receiving morphine

Mother's methadone dose (mg)

No breastfeeding and other opiates
Breastfed and other opiates
No breastfeeding and no other opiates
Breastfed and no other opiates
Counselling and follow-up

- **Essential**: access to food, shelter, safety
- Adding counselling lessens drug use, legal, family, and psychiatric problems
- Prenatal care/education, meals, daycare—all improve compliance and outcome
- Drug and lifestyle stability along with early voluntary MCF referral make apprehension less likely
Key points

• If on methadone, **maintenance** is suggested, unless extremely stable and lots of support

• Higher or **split** doses often needed

• For methadone **tapering**, go very slowly

• **Urine drug testing** is still standard of care but if patient refuses – then no carries!

• For BC guidelines: [www.bcpdh.ca](http://www.bcpdh.ca)