Methadone during Pregnancy? Yes

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Didactic Speaker Disclosures

I have no disclosures to declare, other than that I am the medical director of an Opioid Treatment Program

Learning Objectives

- **Understand the rationale for using medication to treat Opioid Use Disorder (MOUD) in general and during pregnancy**
- **Gain familiarity with the treatment process in the Opioid Treatment Program (OTP) setting**
- **Learn about aspects of methadone treatment that are unique to pregnancy**

Questions

1. What are the risks of opioid use during pregnancy?
2. Why would one treat a pregnant woman who has OUD with an opioid medication?
3. What are the goals of treatment?

Overview

1. Risk to fetus from Opioid Use Disorder (OUD)
2. Rationale for treatment of OUD with medication
3. Differences between methadone and buprenorphine
4. Opioid Treatment Programs (OTPs)
5. Management of pregnant women in the OTP
6. Pain management considerations
7. Very briefly – Neonatal Abstinence Syndrome (NAS) and breastfeeding

OUD and Risk to the Fetus

Limited evidence of significant toxicity from opioids

Substantial risk from opioid withdrawal

1. **Low birth weight**
2. **Meconium staining**
3. **Preterm labor**
4. **Fetal death**

Exposure to infection and contaminants from drug injection

Opioid Agonist Treatment of OUD (MOUD)

Reduces incentive to use illicit opioids

1. **Prevents withdrawal**
2. **Creates a high, stable level of opioid tolerance**

Appropriate adjustment minimizes intoxication

Effective

1. **Reduces risk of mortality by at least half**
2. **Reduces illicit opioid use**
3. **Reduces criminal activity**
4. **Facilitates engagement with relationships, work, school, childcare, healthcare**

Why MOUD in Pregnancy

Why not abstinence?

1. Exposing fetus to withdrawal
2. Relapse rate as high as 90%

Outcomes

1. Improve engagement in pre-natal care
2. More likely to carry pregnancy to term
3. Increased birthweight

Methadone vs. Buprenorphine

Full vs partial agonist at the mu opioid receptor

1. **Buprenorphine ceiling effect**

Methadone advantages

1. **More powerful receptor agonism may work better for patients with high tolerance (e.g., fentanyl users)**
2. **No risk of precipitated withdrawal**
3. **Better retention in treatment**

Methadone disadvantages

1. **Increased risk of respiratory depression**
2. **Highly regulated**

The Basics of Opioid Treatment Programs

Strictly governed by 42cfr – unique among all healthcare modalities – with additional WA State requirements

1. **Diagnosis of OUD**
2. **Duration of 1 year for maintenance (waived for pregnant patients)**
3. **In-person physical evaluation and sign numerous consents (~11)**
4. **ASAM assessment within 30 days**
5. **Required counseling – weekly, gradually decreasing over the 1-2 years**
6. **8 drug tests annually**

OTP Rules, continued

Unsupervised (take-home) medication

1. **42cfr spells out a strict schedule of eligibility beginning at 6x/wk clinic attendance, advancing to once monthly over the course of 2 years**
2. **9 months until eligible for once weekly attendance**
3. **Other criteria must be considered, including drug use, attendance, illegal activity, household stability**

OTP Rules, continued

Dose adjustment

1. **First dose no greater than 30mg – this is never enough to stabilize a patient**
2. **Average doses are 80-120mg daily, often higher for pregnancy**
3. **Patient must meet with a clinician for dose evaluation – increases are generally 5-20mg, every 3-5 days**

Management of Pregnant Patients

Pregnant patients are the highest priority for treatment

1. **Admission on demand**
2. **Monthly F/U meetings with OTP medical provider**
    1. **Monitor response to medication**
    2. **Reinforce importance of pre-natal care**
    3. **Coordinate with Ob care as needed**
3. **Patient expected to provide documentation on ongoing pre-natal care**

Dose Adjustment in Pregnancy

Estrogen induces the metabolism of methadone

1. **Single daily dose may not prevent withdrawal**
2. **Increasing the dose may lead to sedation at peak**

Splitting the dosage twice daily is often necessary

1. **Prevent withdrawal at trough**
2. **Avoid sedation at peak**

Increased total daily dosage is often necessary

Post-natal: 6-12 weeks for estrogen “normalization”

Challenges of Split Dosing

1. OTPs are regulated to provide once daily dosing – reflected both in hours of operation and take-home rules
2. Split dosing requires 8 take-home doses weekly
3. Rules require 9 months in treatment to be eligible for a week's worth of take-home medication (even if patient coming to clinic 6 days/wk)
4. OTP must submit an exception request to SAMHSA

Challenges of Split Dosing, continued

Potential contraindications to split dosing

1. **Domestic Violence**

2. **Sporadic attendance**

3. **Impaired when presenting at the clinic**

Management of Poor Treatment Response

Continuing illicit drug use, impairment, poor attendance

Inpatient stabilization (e.g., Swedish ARS)

1. **Rapid titration to an effective dose**
2. **Ensure period of regular dose ingestion**
3. **Opportunity to address other issues**

Few other options

1. **Psychosocial interventions**
2. **Discharge only if unsafe to continue medication**

Pain Treatment

Patients on methadone maintenance need to have their pain managed similarly to other patients

1. **Briefer duration of analgesia – frequency of dosing**
2. **Tolerance – may require higher dosage of analgesia**

Not treating a pregnant and post-natal women's pain because she is on methadone could be considered malpractice

1. **Unnecessary suffering**
2. **Fetal stress**

Neonatal Abstinence Syndrome (NAS) and Breastfeeding

NAS occurs frequently but not always predictably

1. **Dosage is not a factor**
2. **Dosing regimen is a factor**
3. **Smoking**
4. **Treatable**
5. **Reduced by breastfeeding and skin-to-skin contact**

Methadone is not a contra-indication to breastfeeding
Recommended if not using illicit drugs

Conclusions

What are the risks of opioid use during pregnancy?
Pre-term labor, low birth-weight, fetal death

Why would one treat a pregnant woman who has OUD with an opioid medication?
It is safe and it works; abstinence does not

What are the goals of treatment?
Improving the health of mother and baby

References

- *Treating Women Who Are Pregnant and Parenting for Opioid Use Disorder and the Concurrent Care of Their Infants and Children: Literature Review to Support National Guidance.* Klaman, et al. Journal of Addiction Medicine. Vol. 11, No. 3, May/June 2017.
- Useful handouts for pregnant women with OUD available from SAMHSA/publications
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