WELCOME!

Today’s Topic:
Pregnancy and Opioid Use Disorders

Should I treat pregnant women with Opioid Use Disorders? What about NAS? Should I taper the mom off Buprenorphine before delivery to avoid NAS?

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PREGNANCY AND OPIOID USE DISORDERS

SWEDISH MEDICAL CENTER
ADDICTION RECOVERY SERVICE

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GENERAL DISCLOSURES

The University of Washington School of Medicine also gratefully acknowledges receipt of educational grant support for this activity from the Washington State Legislature through the Safety-Net Hospital Assessment, working to expand access to psychiatric services throughout Washington State.
SPEAKER DISCLOSURES

✓ No conflicts of interest?
OBJECTIVES

1. Be familiar with obstetrical issues related to drug use in pregnancy
2. Be able to manage opioid use disorder in pregnancy
3. Help mother on MAT prepare for delivery
TALKING ABOUT DRUG USE IN PREGNANCY

The mother is more scared than you are.

The mother is desperate to hear that the baby is OK.
IS THE BABY OK?

Three kinds of possible fetal injury

• teratogenic effect
• placental insufficiency
• neuro-developmental impact
TERATOGENIC EFFECT

probably only with alcohol

cocaine use in first trimester

incidence of birth defects equal to non-exposed infants

Arch Pediat Adolesc Med 2005 Sep; 159; 824-834
Acute Neonatal Effects of Cocaine Exposure During Pregnancy
Bauer CR
PLACENTAL INSUFFICIENCY

Poor fetal growth, preterm delivery, abruption (bleeding under the placenta) due to vasoconstriction

risks increase toward end of term

cocaine, methamphetamine, nicotine & carbon monoxide

Paediatr Perinat Epidemiol 1996 Jul; 10(3):269-78
Cocaine and cigarettes: a comparison of risks.
Kistin N, Handler A
PLACENTAL INSUFFICIENCY

On average, the baby of mother continuing to use cocaine into 3rd trimester is 1 lb smaller than non users, but still within normal limits

Arch Pediat Adolesc Med 2005 Sep; 159; 824-834
Acute Neonatal Effects of Cocaine Exposure During Pregnancy
Bauer CR, Langer JC
PLACENTAL INSUFFICIENCY

Cocaine use to the end of pregnancy is associated with

• 4 x preterm labor
• 5 x low birth weight
• 10 x placental abruption
• 5 x fetal demise

Paediatr Perinat Epidemiol 1996 Jul; 10(3):269-78
Cocaine and cigarettes: a comparison of risks.
Kistin N, Handler A
DEVELOPMENTAL PROBLEMS

Probably not

• Excluding alcohol, deficits in global assessments (IQ, Bayley) have not been clearly attributed to substances
• It is difficult to find a proper comparator group
• Some subscores in some subsets of children have been statistically significantly below normal

All studies confirm that growing up in a using household impacts intelligence and emotional well being

JAMA 2001 March 28; 285(12):1613-1625
Growth, Development, and Behavior in Early Childhood Following Prenatal Cocaine Exposure: A systematic review   Frank DA, Augustyn M
OPIOIDS IN PREGNANCY

Poor fetal growth
Preterm birth
Low birth weight
Preterm premature rupture of membranes
Antepartum hemorrhage
Maternal infections

OPIOIDS IN PREGNANCY

Poor fetal growth
Preterm birth
Low birth weight
Preterm premature rupture of membranes
Antepartum hemorrhage
Use of other illicit drugs
Poor prenatal care
Social adversity.

Many of these adverse effects are felt to be secondary to poor health behaviors combined with repeated episodes of in utero opioid withdrawal.

FETAL OPIOID WITHDRAWAL

increased fetal movements
passage of meconium
bradycardia

miscarriage
preterm delivery
intra-uterine fetal demise (stillbirth)

Am J Obstet Gynecol 1985 Feb 15; 151(4)441-4
Precipitated Opiate Withdrawal In Uteruo
Umans JG, Szeto HH
METHADONE TREATMENT

Compared to heroin use, methadone treatment during pregnancy is associated with

• more consistent prenatal care,
• improved fetal growth,
• reduced fetal mortality,
• increased likelihood that the baby will be discharged home with its mother.

A significant relationship was observed between maternal methadone dosage in the first trimester and birth weight, the higher the dosage, the larger the infant.

BUPRENORPHINE TREATMENT

Perinatal outcomes equivalent to methadone
Less Neonatal Abstinence
METHADONE VS. BUPRENORPHINE

• NAS
• Convenience
• Sobriety
WHY NOT DETOX?

Relapse rates ranging from 17% to 96% (average 48%)

Of 101 patients who initiated medically assisted withdrawal only 24 were available for follow-up.

10 had completed detox,
none went to rehab,
only 1 was abstinent at the time of delivery
average birth weight 5 lbs 10 oz

Only one study demonstrated a decrease in NAS.

WHY NOT DETOX?

Relapse rates ranging from 17% to 96% (average 48%)

These were all case series, not randomized data. Quality of data reported is concerning.

No study of medically assisted withdrawal has examined maternal outcomes into the postpartum period, a particularly vulnerable time for relapse.

The most important variable in the ability to retain custodial care of the newborn is relapse.

When opioid maintenance treatment is available, medically supervised withdrawal should be discouraged during pregnancy.
NEONATAL ABSTINENCE TREATMENT

Traditional treatment

Babies in NICU
Withdrawal measured with 22 element Finnegan score
Treated with morphine, tapered over several weeks
NEONATAL ABSTINENCE TREATMENT

Transformed treatment

Babies rooming in with mothers
Breast feeding encouraged
Mothers supported (dyadic care)
Withdrawal measured by Eat, Sleep, Console
Treated with individual doses of morphine when needed
TRANSFORMING NAS CARE

![Graph showing the average length of stay (in days) from 2003 to 2016. The x-axis represents the years, and the y-axis represents the average length of stay. The graph shows a downward trend with fluctuations.]
WHAT WOULD YOU SAY?

Sunny is 27 years old and 33 weeks pregnant. She came to hospital “cramping” 8 days ago and was started on methadone. Her last baby was born at 34 weeks, 5 lbs 14 oz. Her cervical exam is 2 cm / 50% and fortunately hasn’t changed.

She is now stable at 70 mg qAM and a methadone clinic appt is set up for tomorrow.

“Thanks for everything you’ve done, but I can’t be on methadone. I don’t want my baby to be born addicted”.
WHAT WOULD YOU SAY?

Carla is getting ready to take her baby home from the nursery after an 8-day treatment for NAS.

She started on buprenorphine program when she was 3 months pregnant and did pretty well. She had one short relapse on methamphetamine early on but has been sober since she started going to Celebrate Recovery meetings.

The delivery went great and her family was very supportive. Carla has been very attentive to the baby but feeling guilty about the NAS.

“I promised my husband I would stop the Subutex after the baby was born, but now I’m afraid... I mean what if I just start using again? What do you think I should do?”