Managing Opioid Use Disorder in Pregnant People

Rates of opioid use disorder (OUD) and overdose deaths during pregnancy have skyrocketed in recent years. Untreated OUD is associated with many adverse outcomes, including overdose death, that can be mitigated by proper medication for opioid use disorder (MOUD) treatment. Methadone and buprenorphine have a robust evidence base, while injectable naltrexone lacks enough data to recommend during pregnancy and is not recommended.

Key Outcomes Improved by MOUD Treatment

- Mitigation of preterm birth
- Reduction of intrauterine growth restriction
- Prevention of maternal cardiac arrest
- Lowering of placental abruption
- Reduction of comorbid substance use
- Prevention of fatal and non-fatal overdose

Treatment Recommendations

- Avoid withdrawal: Opioid withdrawal can lead to catecholamine surges, inducing uterine contractions, reducing placental blood flow, and potentially causing fetal hypoxia, preterm birth, and fetal demise.
- Both methadone and buprenorphine have been proven safe and effective in pregnancy, with differing pros and cons; neither is universally superior.
- Methadone is associated with a lower dropout rate over the course of pregnancy when compared to buprenorphine.
- Buprenorphine results in less severe neonatal opioid withdrawal syndrome and shorter post-delivery hospital stays compared to methadone.

Prescribing Methadone in Pregnancy

- Initiate treatment in the hospital setting.
- Begin with a small first dose (5–10 mg) unless the patient is in withdrawal. Give another 5–10 mg if withdrawal symptoms develop.
- In cases of opioid withdrawal, start with a higher dose (20–30 mg) and add 5–10 mg every three to six hours until withdrawal is relieved, up to a maximum of 50 mg in 24 hours. Treat residual withdrawal using typical symptomatic treatment (see "Managing Opioid Withdrawal in the Inpatient Setting" fact sheet).
- While in the hospital, daily methadone dose can be increased by 5-10 mg until withdrawal and cravings are adequately treated.
- Once stable, arrange follow-up at a federally recognized opioid treatment program.
- Adjust dosage more slowly in outpatient settings; weekly increase should not exceed 10 mg per day.
- Doses may need to be higher during pregnancy (>120 mg/day), particularly in the last trimester due to increased metabolism. Potentially split into twice-daily dosing for a steadier plasma concentration.

Prescribing Buprenorphine in Pregnancy

- Buprenorphine induction after 24 weeks gestation should be done in the hospital. This is the gestational age after which routine fetal monitoring is feasible.
- Outpatient induction can be considered before 24 weeks of gestation with immediate ER evaluation if precipitated withdrawal develops.
- Utilize typical induction procedure (see "How to Discuss and Initiate Buprenorphine" fact sheet for further details):
 - Give an initial dose of 2-4 mg once Clinical Opiate Withdrawal Scale score >8. Give additional doses of 2-4 mg every two to four hours for a total dose of 8–12 mg in the first 24 hours.
 - Give the total amount received on day 1 as a single dose on the morning of day 2. Continue to give additional doses for residual symptoms up to a total daily dose of 16 mg.
 - Repeat on day 3 up to 24 mg, which is the usual maximum daily dose.
- Dose adjustments of buprenorphine during pregnancy are typically less frequent than with methadone.
- Either buprenorphine monoproduct or buprenorphine/naloxone combination can be used in pregnancy. The monoproduct has historically been favored due to potential risks of fetal naloxone exposure, but data support the safe use of the combination product during pregnancy (Link HM et al, Am J Obstet Gynecol 2020;2(3):100179).





Postpartum

- Some patients on methadone may need their dose lowered after delivery, though others will do better by remaining on the high dose reached during pregnancy (Link et al, 2020). Monitor your patient carefully for signs of oversedation and gradually lower the dose if necessary.
- Encourage continuation of treatment after delivery; MOUD decreases overdose mortality tenfold six months postpartum compared to those not on treatment (Schiff DM et al, Obstet Gynecol 2018;132(2):466-474).
- Promote breastfeeding in patients who are not using illicit substances other than opioids, as it lowers the incidence and severity of neonatal opioid withdrawal syndrome.

Other Considerations

- Pregnancy can be a touchpoint for additional supportive services like prenatal care, nutrition counseling, housing assistance, and case management.
- Patient concerns about infant foster care placement due to MOUD should be addressed. In reality, MOUD treatment increases the likelihood of the infant being discharged home with their biological parent (Singelton R et al, J Addict Med 2022;16(6):e366-e373).