

Opioids in Pregnancy

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Disclosures

I have no financial disclosures or conflicts of interest



Overview

- Safety of non-opioid analgesics
- Fetal/Obstetrical risks of opioids
- Opioid withdrawal during pregnancy
- Neonatal abstinence syndrome
- Clinical recommendations



Safety of non-opioid analgesics

NSAIDs: Category C or D

- First trimester use: not strongly associated with anomalies
- Long-term use contraindicated: oligohydramnios, childhood asthma?
- Use > 30 weeks: premature closure of fetal ductus arteriosus
- Supervised course of NSAID reasonable for uterine tocolysis, surgical or musculoskeletal pain (best <48 hours)

Acetaminophen: Category B

- Fetal toxicity in maternal overdose
- Recent studies show association with childhood asthma, ADHD and potentially autism



Fetal risks of opioids

Opioids are known to cross the placenta

- Several recent epidemiologic studies demonstrate increase risk of neural tube, abdominal wall and cardiac defects
- Baseline risk of congenital anomalies is 2-3%, evidence is equivocal for clear pattern of teratogenicity with opioids during the first trimester



Obstetrical risks of opioids

Association with adverse pregnancy outcomes:

- Preterm delivery, poor fetal growth, stillbirth
- Higher rates of depression, anxiety, and chronic medical conditions
- Increased health care costs

Data may be confounded by:

 Comorbid medical complications, obesity, nutritional and socioeconomic status, alcohol, tobacco and illegal drugs



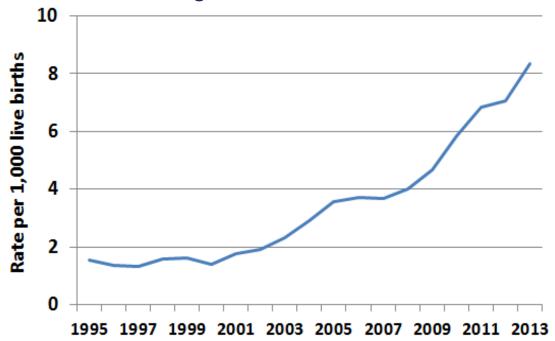
Neonatal Abstinence Syndrome

- 30-80% of infants exposed to opioids in utero require treatment for NAS (60-90% exposed to methadone)
- Can occur from the first 24 hours to day 14 of life
- Symptoms include: irritability, tremulousness, sweating, nasal stuffiness, poor suckling, diarrhea, vomiting and seizure (Finnegan score)
- Neither the incidence or severity of NAS directly correlate with maternal methadone dose



Neonatal Abstinence Syndrome (NAS)

Infant Hospitalizations for Neonatal Abstinence Syndrome in Washington State 1990-2013



Source: Inpatient Hospital Discharge & Birth Certificate Data, NAS= ICD diagnosis code of 779.5



Opioid withdrawal during pregnancy

- Safety of medically supervised opioid taper or detoxification not well studied
- Historical reports of fetal loss, preterm labor and fetal distress with maternal opioid withdrawal
- Inpatient opioid withdrawal has been described
- Care must be individualized



Clinical recommendations

- Due to maternal, fetal and neonatal risks, avoid treatment of pain with opioids before conception or initiation during pregnancy
- Consider use of acetaminophen, non-pharmacologic therapies as appropriate
- Medically supervised opioid discontinuation or withdrawal must be individualized
- Counseling regarding neonatal abstinence syndrome should occur prior to delivery