Methadone MAT

Spontaneous Vaginal Delivery (SVD)

- Continue scheduled methadone daily
- Patient may defer additional analgesia in labor—“unmedicated trial of labor”
- If analgesia is requested, regional anesthesia preferred unless otherwise contraindicated
- Adjunctive NSAID therapy postpartum (ketorolac, ibuprofen, celecoxib) unless contraindicated
- Do not schedule immediate dose reduction of MAT postpartum (most can reduce when outpatient)
- If the delivery is complicated (traumatic lacerations such as 3rd/4th degree perineal or deep sulcal; operative vaginal delivery; vaginal hematoma) or if pain is not adequately controlled with non-opioid medications, augment with an oral opiate such as hydrocodone

Cesarean Delivery

- Continue scheduled methadone daily
  - May consider BID/TID (twice a day/three times a day) split dose while inpatient to maximize the analgesic effects of methadone
- Regional anesthesia preferred unless otherwise contraindicated
- Adjunctive NSAID therapy immediately postpartum (ketorolac, ibuprofen, celecoxib) unless contraindicated
- Consider preoperative and postpartum gabapentin or Lyrica if the delivery is scheduled
- Augment postpartum with an oral opiate such as hydrocodone or oxycodone
- Morphine or dilaudid IV prn (when necessary) for breakthrough pain
- Do not schedule immediate dose reduction of MAT postpartum (most can reduce when outpatient). Exception is in the case of oversedation, where a dose decrease may be indicated in the inpatient postpartum period
- Adding a long acting narcotic (e.g. duramorph) to either a spinal or epidural is acceptable and preferable for post-operative analgesia in women having a cesarean delivery (at the usual dose and not modified based in the woman's MAT or illicit drug use)

Changing Medications

- ACOG does not approve transitioning women from methadone to buprenorphine during pregnancy; it may cause precipitated withdrawal. If a switch is unavoidable (e.g. methadone will no longer be available to the patient), it should be managed by specialists with appropriate expertise.
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<td>These may occasionally be recommended and managed by a pain management specialist:</td>
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<td>- Transition to methadone (20-40mg, if not adequate increase by 5-10mg daily) prior to delivery and use short acting opioids to relieve acute pain. Discontinue methadone therapy and convert back to buprenorphine therapy (via induction protocol) when acute pain management is no longer needed</td>
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### Special Considerations

#### Patient in Acute Withdrawal Who Presents For Imminent Delivery
- Can be managed with IV opioids and induction to MAT instituted after delivery

#### Patient Presents For Delivery On Buprenorphine Plus Naloxone
- Continue the daily dose and follow the buprenorphine acute pain management protocols

#### Patient Had Witnessed Emesis After Methadone Administration
- Consider guidelines for replacing vomited doses per the College of Physicians and Surgeons of Ontario, 2004:
  - If emesis occurs less than 15 minutes after consumption, consider replacing 50% to 75% of the full dose
    - If the dose is more than 120 mg, consider replacing only 50% of the full dose
  - If emesis occurs at 15 to 30 minutes after consumption, consider replacing 25% to 50% of the full dose
  - If emesis occurs at more than 30 minutes after consumption, do not replace the dose

### Other Considerations
- If the patient cannot receive oral intake, methadone can be given parenterally. If given SQ (subcutaneously) or IM (intramuscular), use 1/2-2/3 of the maintenance dose divided BID-QID (twice a day – four times a day).
- Successful opioid adjunct therapy in the patient with MAT may require significantly higher doses (usually 30-100% more with average 50%, however, can be 2-3x more) compared to the opiate naïve patient.
### Contraindications to Regional Anesthesia

- Technical limitations; thrombocytopenia (80-100,000); sepsis; INR>1.2; increased intracranial pressure or presence of ventriculo-peritoneal shunt; unstable c-spine or spinal cord injury; patient refusal; unstable hemodynamics; emergency situation (time sensitive)
- Alternatives When Regional Anesthesia Is Contraindicated
  - General anesthesia with transition to postpartum PCA (morphine; dilaudid) Phenergan and Morphine IV in early labor (<6cm), must transition to a shorter acting opioid (fentanyl) in active labor
  - Labor PCA (fentanyl)
  - Pudendal block

### Other Considerations

- Avoid NSAIDs: coagulopathy; known hypersensitivity to ASA (Acetylsalicylic Acid) or NSAID (Non-Steroidal Anti Inflammatory Drugs); bleeding GI (Gastrointestinal) ulcer; severe hepatic impairment; history of TIA/CVA (Transient Ischemic Attack/Cerebral Vascular Accident) or MI (Myocardial Infarction); renal impairment. Consider carefully in patients with peptic ulcer disease; history bleeding ulcer; moderate hepatic impairment (Child-Pugh Class B reduce dose by 50%)
- Avoid Acetaminophen: hepatic impairment
- Limit Acetaminophen: <= 4gm daily with normal hepatic function
- Avoid Opiate Antagonists: naloxone; Nubain; Stadol; Talwin
- CYP34A (Cytochrome P450 3A4) inducers (rifampicin, phenobarbital, carbamazepine, phenytoin, St. John’s Wort, cocaine): dose increase may be required
- CYP34A inhibitors (cimetidine, gestodene, clarithromycin, fluconazole, voriconizole, ketoconazole, clarithromycin, fluoxetine, fluvoxamine, amitriptyline, quetiapine, sertraline): dose reduction may be required
- Antiretrovirals: some increase and others decrease metabolism of methadone and buprenorphine. Methadone increases blood levels of AZT, and can decrease levels of others.
- Long QT Syndrome: avoid methadone, which can prolong the QT interval (further potentiated by hypokalemia)
- Gabapentin Dose: 100mg po q6hr (by mouth every six hours)
  - Titrate q48hr (every 48 hours) up to 2400mg QD (each day)
- LYRICA Dose: 25-50mg po q8hr (by mouth every eight hours)
  - Titrate daily up to 150mg q8hr (every eight hours)
- Methadone and buprenorphine can be used while breastfeeding