Management of Addiction & Pain During Pregnancy and Labor

Carl Christensen, MD, PhD, FASAM
- Clinical Associate Professor, Depts of Psychiatry and OB/Gyn, WSU School of Med
- Medical Director, Mich Health Prof Recovery Program
- Past President, Mich Society Addiction Medicine
- Medical Director, Dawn Farm
- Ab7059@wayne.edu
Topics: the pregnant patient who is:

- In withdrawal
- Intoxicated/overdosed
- “Out of meds”
- In labor
I: the patient in Withdrawal

- Part of physical dependence to opioids & sedatives
- MAY BE addiction: would also have:
  - Craving
  - Compulsion
  - Loss of control
  - Use despite Consequences (harm)
- Helps you determine which med to use: CAN’T use regular opioids for addiction!
Withdrawal may be due to:

Opiates & Opioids

- **Opiates:** Codeine, Morphine (heroin)

- **Opioids:**
  - Hydrocodone (Norco)
  - Hydromorphone (Dilaudid)
  - Oxycodone (Percocet, Oxycontin)
  - Oxymorphone (Opana)
  - Fentanyl
  - Methadone
  - Buprenorphine (Suboxone/Subutex/Zubsolv)
Withdrawal may be due to:

Opiates & Opioids

- Opiates: Codeine, Morphine (heroin)
- Opioids:
  - Hydrocodone (Norco)
  - Hydromorphone (Dilaudid)
  - Oxycodone (Percocet, Oxycontin)
  - Oxymorphone (Opana)
  - Fentanyl
  - Methadone
  - Buprenorphine (Suboxone/Subutex/Zubsolv)

Sedatives

- Alcohol
- Barbiturates
- Muscle relaxers: carisoprodol (Soma)
- “Sleepers” : Ambien, Lunesta, Sonata
- Benzodiazepines
Withdrawal comparison:

Opiates & Opioids

- Worsening vitals
- Agitation
- Tremors
- Anxiety
- Sweating
- Nausea/Vomiting
- Confusion
- Tactile/auditory disturbances
- Hallucinations
- HEADACHE

Sedatives (CIWA)

- Worsening vitals
- Agitation
- Tremors
- Anxiety
- Sweating
- Nausea/Vomiting
- Confusion
- Tactile/auditory disturbances
- Hallucinations
- HEADACHE
## Withdrawal comparison:

### Opiates & Opioids (COWS)
- Pulse
- Restlessness
- Tremor
- Irritability
- Sweating
- Nausea/Vomiting
- Nose running/tearing/gooseflesh
- Mydriasis

### Sedatives (CIWA)
- (worsening vitals)
- Agitation
- Tremors
- Anxiety
- Sweating
- Nausea/Vomiting
- Confusion
- Tactile/auditory disturbances
- Hallucinations
- HEADACHE
# Clinical Institute Withdrawal Assessment

## CIWA: ETOH and sedatives

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Score Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea/vomiting</td>
<td>0 - 7</td>
<td>0 - none; 1 - mild nausea, no vomiting; 4 - intermittent nausea; 7 - constant nausea, frequent dry heaves &amp; vomiting.</td>
</tr>
<tr>
<td>Orientation</td>
<td>0 - 4</td>
<td>0 - oriented; 1 - uncertain about date; 2 - disoriented to date by no more than 2 days; 3 - disoriented to date by &gt; 2 days; 4 - disoriented to place and/or person</td>
</tr>
<tr>
<td>Tremors</td>
<td>0 - 7</td>
<td>0 - no tremor; 1 - not visible but can be felt; 4 - moderate w/ arms extended; 7 - severe, even w/ arms not extended.</td>
</tr>
<tr>
<td>Tactile Disturbances</td>
<td>0 - 7</td>
<td>0 - none; 1 - very mild itch, P&amp;N, numbness; 2 - mild itch, P&amp;N, burning, numbness; 3 - moderate itch, P&amp;N, burning, numbness; 4 - moderate hallucinations; 5 - severe hallucinations; 6 - extremely severe hallucinations; 7 - continuous hallucinations</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0 - 7</td>
<td>0 - none, at ease; 1 - mildly anxious; 4 - moderately anxious or guarded; 7 - equivalent to acute panic state</td>
</tr>
<tr>
<td>Auditory Disturbances</td>
<td>0 - 7</td>
<td>0 - not present; 1 - very mild harshness/ability to startle; 2 - mild harshness, ability to startle; 3 - moderate harshness, ability to startle; 4 - moderate hallucinations; 5 severe hallucinations; 6 - extremely severe hallucinations; 7 - continuous hallucinations</td>
</tr>
<tr>
<td>Agitation</td>
<td>0 - 7</td>
<td>0 - normal activity; 1 - somewhat normal activity; 4 - moderately fidgety/restless; 7 - paces or constantly thrashes about</td>
</tr>
<tr>
<td>Visual Disturbances</td>
<td>0 - 7</td>
<td>0 - not present; 1 - very mild sensitivity; 2 - mild sensitivity; 3 - moderate sensitivity; 4 - moderate hallucinations; 5 - severe hallucinations; 6 - extremely severe hallucinations; 7 - continuous hallucinations</td>
</tr>
<tr>
<td>Paroxysmal Sweats</td>
<td>0 - 7</td>
<td>0 - no sweats; 1 - barely perceptible sweating, palms moist; 4 - beads of sweat obvious on forehead; 7 - drenching sweat</td>
</tr>
<tr>
<td>Headache</td>
<td>0 - 7</td>
<td>0 - not present; 1 - very mild; 2 - mild; 3 - moderate; 4 - moderately severe; 5 - severe; 6 - very severe; 7 - extremely severe</td>
</tr>
</tbody>
</table>
## COWS: opioids

<table>
<thead>
<tr>
<th>Category</th>
<th>0 point</th>
<th>1</th>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resting pulse</strong></td>
<td>&lt;80</td>
<td>80 to 100</td>
<td>100 to 120</td>
<td>&gt;120</td>
</tr>
<tr>
<td><strong>Sweating</strong></td>
<td>None</td>
<td>Feels sweaty</td>
<td>Beads of sweat</td>
<td>Dripping sweat</td>
</tr>
<tr>
<td><strong>Restlessness</strong></td>
<td>None</td>
<td>Complains</td>
<td>Moves around</td>
<td>Unable to sit still</td>
</tr>
<tr>
<td><strong>Tremor</strong></td>
<td>None</td>
<td>Felt, not seen</td>
<td>Slight</td>
<td>Gross tremor</td>
</tr>
<tr>
<td><strong>Pupil size</strong></td>
<td>Normal</td>
<td>Slightly enlarged</td>
<td>Moderately enlarged</td>
<td>“almost no iris seen”</td>
</tr>
<tr>
<td><strong>GI upset</strong></td>
<td>None</td>
<td>Loose stool</td>
<td>Vomiting or diarrhea</td>
<td>Multiple episodes</td>
</tr>
<tr>
<td><strong>Irritability</strong></td>
<td>None</td>
<td>Patient reports it</td>
<td>Obviously irritable</td>
<td>Can’t finish interview</td>
</tr>
<tr>
<td><strong>Bone Aches</strong></td>
<td>None</td>
<td>Mild, diffuse</td>
<td>Severe, diffuse</td>
<td>Patient rubs joints and bones, can’t sit still d/t pain.</td>
</tr>
<tr>
<td><strong>Yawning</strong></td>
<td>None</td>
<td>Once or twice during interview</td>
<td>3-4 times during interview</td>
<td>Several times a minute</td>
</tr>
<tr>
<td><strong>Nose running/ tearing</strong></td>
<td>None</td>
<td>Stuff nose / moist eyes</td>
<td>Nose running, ears tearing</td>
<td>Continuous, either, can’t control.</td>
</tr>
<tr>
<td><strong>Gooseflesh</strong></td>
<td>Smooth</td>
<td></td>
<td>(3) skin piloerection can be felt or hairs standing up on arms</td>
<td>(5) prominent piloerection</td>
</tr>
</tbody>
</table>

Clinical Opioid Withdrawal Scale
What are the DANGERS of withdrawal?

Opiates & Opioids
- Progressive N/V
- Dehydration
- Anecdotal pregnancy loss
- Patient LEAVES
- Patient USES

Sedatives
What are the DANGERS of withdrawal?

Opiates & Opioids
- Progressive N/V
- Dehydration
- Anecdotal pregnancy loss
- Patient LEAVES
- Patient USES

Sedatives
- Hypertensive emergency
- Withdrawal SEIZURE
- Pregnancy loss (documented)
- Patient LEAVES
- Patient USES
How to tell which one it is?

- The patient may tell you…but be careful!
- The drug screen may tell you….but it is not reliable!
  - Kratom, Fentanyl, Soma & many false positives
- The patient may be established with you….. But may have switched meds!
- Your responsibility is to RELIEVE withdrawal, not to make it worse!
- AVOID BUPRENORPHINE for emergencies
- You can use short acting opioids in the hospital!
Example:

■ A pregnant patients at 30 weeks is dependent on heroin and Xanax.
■ She presents to L&D in moderate withdrawal.
■ She is given 2 mg of buprenorphine SL
■ She develops severe N&V.
■ What happened???
Example:

- A pregnant patient at 30 weeks is dependent on heroin and Xanax.
- She presents to L&D in moderate withdrawal.
- She is given 2 mg of buprenorphine SL.
- She develops severe N&V.
- What happened?? She was withdrawing from sedatives, not opioids!
Management of withdrawal in pregnancy: Common features

- OB care including IV hydration
- Obtain urine drug screen AND SEND IT FOR CONFIRMATION
  - If the patient refuses: document!
- Blood for AST, ALT (liver function tests)
- BAC if available (blood alcohol)
- MAPS (Michigan Automated Prescription Search)
  - Remember MAPS will NOT pick up methadone maintenance, muscle relaxers, gabapentin
CASE: opioid withdrawal

- A patient is admitted to Sinai Grace hospital at 28 weeks gestation.
- She admits to being addicted to heroin.
- She is in moderate withdrawal.
- Her urine drug screen shows opiates, THC and cocaine.
- Methadone 30 mg is ordered.
- The pharmacy refuses to fill the prescription.
Management of withdrawal in pregnancy: suspected opioid withdrawal

Non narcotic medications for withdrawal:

- Gabapentin (Neurontin) 300 mg initial dose.
- Hydroxyzine (Vistaril) 50 mg initial dose.
- Tiazanidine (Zanaflex) 2 mg initial dose.
- Clonidine (Catapres) 0.1 mg initial dose.*
- Lorazepam (Ativan) 1 mg initial dose (inpatient only)

However, these are a “temporary fix” until buprenorphine or methadone can be given.
Management of withdrawal in pregnancy: suspected opioid withdrawal: narcotics

- You can give buprenorphine (Suboxone/Subutex/Zubsolv) if you are SURE they have not just used.

- 2 to 4 mg SL buprenorphine, monitor for withdrawal.
  - If the patient gets WORSE:  
    - IV hydromorphone 1 mg PRN till withdrawal resolves.
  - If the patient gets BETTER:  
    - Keep giving SL bup 2 mg q 6; increase to 4 mg q 6 if needed.
    - Can’t give buprenorphine scrip at DC without DATA waiver.
    - Your addictionist can prescribe electronically
Management of withdrawal in pregnancy: suspected opioid withdrawal

- **BUT:** Michigan Medicaid will NOT pay for buprenorphine at DC until it is preauthorized.
- Takes ~24 hr.
- When ready for D/C, your patient will take the prescription to the pharmacy, find out they have to pay $$$$ and leave
- OR: the pharmacy will refuse to let them pay for it!
- Solution: prescribe Zubsolv®; it is free for 2 weeks.
Management of withdrawal in pregnancy: suspected opioid withdrawal

- You can also give methadone-30 mg
- Allowed by DEA/CSA without methadone license
- If they are already attending a methadone clinic…you need to verify dose before giving their “prescribed dose”.
- If you can’t confirm the dose….give 30 mg plus additional 10 mg (state regulations)
Risk of early methadone dosing

- Do NOT increase the methadone dose too quickly: this is the most dangerous time for a methadone maintenance patient!
- Outpatient management is 5 mg q 48.
- Inpatient can be quicker IF MONITORED.
What to do if the pregnant patient remains in the hospital? The Controlled Substance Act (CSA)

**Answer:** Methadone may be administered in such circumstances when the following conditions are met. A practitioner, or authorized hospital staff, may administer or dispense narcotic drugs in a hospital to maintain or detoxify a person as an incidental adjunct to medical or surgical treatment of conditions other than addiction. *Pregnancy is recognized as a medical condition by both DEA and FDA, and, therefore, this would be considered medical treatment of a condition other than addiction.* (emphasis added).

Such medical treatment is allowed "in a hospital" or institutional setting.

What to do if the patient RETURNS to the hospital for another medical condition (i.e., postpartum hemorrhage)?

**Question:** An NTP patient has been admitted to a hospital for treatment of a medical condition other than addiction. Can the hospital supply the treatment medication?

**Answer:** Yes. A physician, or authorized hospital staff, may administer or dispense narcotic drugs in a hospital to maintain or detoxify a person as an incidental adjunct to medical or surgical treatment of conditions other than addiction. [21 CFR 1306.07(c)].

NTP: narcotic treatment program

What to do when the patient is discharged from the hospital?? The Controlled Substance Act (CSA)

- **Answer**: You may administer opioids to a patient for the purpose of relieving acute withdrawal symptoms while arrangements are made to refer your patient for addiction treatment, under the following conditions [21 CFR 1306.07(b)]:
  - Not more than one day’s medication may be administered or given to your patient at one time,
  - This treatment may not be carried out for more than three days, and
  - This three-day period cannot be renewed or extended.

- This allows a patient to be treated for 72 hr for their addiction as an outpatient (by coming every day).

What to do if the patient is incarcerated??

- **Question**: May a Department of Corrections medical staff administer methadone to incarcerated, pregnant, opioid dependent women during the course of their pregnancy without a separate registration as an NTP?

- **Answer**: Methadone may be administered in such circumstances when the following conditions are met. A practitioner, or authorized hospital staff, may administer or dispense narcotic drugs in a hospital to maintain or detoxify a person as an incidental adjunct to medical or surgical treatment of conditions other than addiction. Pregnancy is recognized as a medical condition by both DEA and FDA, and, therefore, this would be considered medical treatment of a condition other than addiction.

- Such medical treatment is allowed "in a hospital" or institutional setting. However, the Department of Corrections must be licensed by both the state and DEA as a clinic, a hospital, or a hospital/clinic. [21 CFR 1306.07(c)]

Which is better, buprenorphine or methadone?

**Buprenorphine**
- It is considered safer than methadone.
- The patient will have a prescription and will have the medication at home.
- It may be abused, diverted or stolen.
- You will only see the patient every 1 to 2 weeks.
- The patient can overdose because they are not being seen.

**Methadone**
- The risk is high the first 2 weeks of treatment and when they leave.
- The patient has to come to the clinic 6 to 7 days a week.
- There is a major burden to patient and family.
- There is illegal activity at any methadone clinic.
- Methadone is more likely to cause an overdose if misused.
Which one should you choose?
If the patient is:

**Buprenorphine**
- Using short acting opioids only
- No active benzodiazepine use
- Stable environment
- Able to engage in treatment
- Has Medicaid!!
- Safe to see weekly or less!

**Methadone**
- Using long acting opioids
- Using benzodiazepines
- Failed buprenorphine
- No insurance coverage
How to refer the patient at discharge?

Referral sources

- If they are on buprenorphine:  [www.suboxone.com](http://www.suboxone.com) OR:
- SAMHSA buprenorphine locator:
- Needs to be someone with a DATA “X” waiver
- You will probably NOT be able to find a buprenorphine provider that will treat a pregnant patient.
  - There are only TWO providers in Michigan that are Board Certified in both Addiction Medicine and OB Gyn.
How to refer the patient at discharge?

Referral sources - buprenorphine

- Carl Christensen: 734-368-9871
- Univ of Mich Addiction Treatment Services (UMATS): (734) 764-0231
- Tolan Medical Clinic: (313-993-3964)
- William Morrone, DO (Saginaw/Bay City): (989) 928-3566
- John Lehtinen, MD (Marquette): (906) 225-4555
- Lori Mausi, MD: (586) 393-3040
- Sacred Heart: (810) 392-2167
How to refer the patient at discharge?

Referral sources- methadone

- Tolan Medical Clinic (313-993-3964)
- Sacred Heart (810) 392-2167
- Wayne County (DWMHA): 800 241 4949
- Oakland County (PACE): 248 858 5200
- Macomb County: (ACCESS): 586 948 0222
- Michigan PIHP: (google)

Standard residential treatment will NOT accept an opioid dependent pregnant patient on M.A.T.
Sedatives: alcohol and benzodiazepines
Management of withdrawal in pregnancy: suspected sedative withdrawal

- Management of sedative (benzodiazepines/barbiturates) and alcohol is similar.
- Goal is control of autonomic “overdrive”.
- Do NOT treat hypertension with diuretics or beta blockers.
- Most preferred meds are benzodiazepines: diazepam (Valium); lorazepam (Ativan), chlordiazepoxide (Librium).
- Secondary meds include barbiturates (secobarbital, phenobarbital) and Propofol.
- PATIENTS SHOULD NOT BE DISCHARGED HOME WITH BENZOS OR PHENOBARBITAL DUE TO RELAPSE.
Management of withdrawal in pregnancy: suspected sedative withdrawal

Symptom triggered (CIWA>8)

- Diazepam 5 mg to 10 mg q 15-30 mins.
- Lorazepam 2 to 4 mg IV q 15-30 mins
- Chlordiazepoxide 25 mg po hourly, up to 100 mg doses

- ONLY use these protocols if patient is under continuous monitoring and CIWA is used.
Management of withdrawal in pregnancy: suspected sedative withdrawal

Symptom triggered (CIWA>8)
- Diazepam 5 mg to 10 mg q 15-30 mins.
- Lorazepam 2 to 4 mg q 15-30 mins
- Chlordiazepoxide 25 mg hourly, up to 100 mg doses

- ONLY use these protocols if patient is under continuous monitoring and CIWA is used.

Scheduled dosing
- Chlordiazepoxide po 50 mg q 6.
- Diazepam po 10 mg + q 6 to 8 hr
- Lorazepam po 1 to 2 q 6 hr.
- Cut doses in half after 48 hr if patient responds
Sedative / alcohol withdrawal in pregnancy: what to do at discharge?

- Expected relapse rate will approach 100%
- The patient is now at risk for OVERDOSE if provided with benzodiazepines/ phenobarbital.
- Safest route is residential treatment.
- If not, consider DC with gabapentin (Neurontin) 300 to 600 TID for no more than one week.
Stimulants: cocaine & amphetamines
What about stimulant / cocaine withdrawal?

- No dangerous withdrawal syndrome is seen.
- Exception: psychosis → psychiatric consult
  - If needed, give lorazepam 2 mg or diazepam 10 mg iv while you wait for expert management.
- Supportive treatment only
- NEVER use beta blockers or labetalol
- Indication for residential treatment (due to high risk of relapse)
II: the Intoxicated Patient

“What Goes Up, Must Come Down”
II: the Intoxicated Patient

- Alcohol and Benzodiazepine intoxication:
  - The risk of overdose to benzodiazepines alone is minimal UNLESS there are other drugs present.
  - The risk of overdose with alcohol escalates with BAC; respiratory depression occurs at ~ 0.400
  - The major risk of intoxication is withdrawal
  - Patients should be monitored continuously, even when intoxicated.
II: the Intoxicated Patient: alcohol

- For alcohol: the BAC will drop at ~ 0.015 per hour
  - Zero order kinetics: doesn’t matter how high or how big.
- As the patient approaches zero BAC, withdrawal will occur.
- Patient is at greatest risk of seizures at this time.
- Institute withdrawal protocol
- Do NOT give benzodiazepines to an intoxicated patient!
Your concern for patient and fetus will primarily be hypertension and possibly psychosis.

AVOID standard anti hypertensive therapy, including diuretics and beta blockers.

Use benzodiazepines first line and obtain psych consultation if psych symptoms continue.

Ck labs for rhabdomyolysis (muscle necrosis)

Hyperthermia (fever) may occur
II: the Intoxicated Patient: opioids

"Bottom Line": death
II: the intoxicated patient: opioids

- Prior to Fentanyl, ASAM recommended avoiding naloxone for a pregnant woman “unless absolutely necessary”
- Currently: give naloxone (Narcan) if needed!
- Chance of fetal loss is minimal, but chance of maternal death is significant.
II: the intoxicated patient: opioids

- Remember that intoxication will be followed by withdrawal; timing depends on the drug used.
- Expect to proceed with withdrawal management (see above).
- If the patient leaves AMA: give them a prescription for naloxone, 4 mg (Adapt)
- DO NOT GIVE OPIOIDS (norco, oxycodone)
“Here’s What Happened”......
III: the patient who is out of medications

- “I dropped my Suboxone in the toilet” (it’s in film)
- “my dog ate my Norco”
- “my pills were stolen”
- “I left my methadone on the bus”
- ”my doctor discharged me when they found out I was pregnant”
- “I had to sell my Suboxone to pay my mortgage”
“I can’t find my buprenorphine”

- Differential includes accident, abuse and diversion.
- Prescription can be verified by MAPS.
- Patient can be given a dose IN the hospital but not prescribed without an “X” number (72 hr rule)
- At the very least: prescribe detox meds.
  - DON’T GIVE ONE DOSE AND DISCHARGE!
- The patient will NEED TO PAY to replace the prescription.
- DON’T change the dosing to “help out” the patient!
Missing methadone

- Common reasons: missed the clinic hours, incarceration, discharged from the clinic.
- Almost always happens when clinic is closed!
- At the MOST: you can dose outpatient for 72 hr (CSA)
  - You should only give 30-40 mg without confirming the dose!
- At the LEAST: detox meds
- NEVER prescribe methadone to cover the patient!
- DON’T switch to buprenorphine (induced withdrawal)
- DON’T prescribe regular opioids
IV: Management of Labor & Delivery
IV: Management of Labor & Delivery

- Historically, patients on methadone who were admitted to Labor and Delivery were maintained on their methadone dose after confirmation.
- Additional analgesics were given during labor and postpartum.
- Main issue was denial of adequate pain meds to “teach the patient a lesson” for exposing the fetus to methadone.
- Because buprenorphine is a “partial agonist”, recommendations were to DC prior to surgery/delivery.
Fig. 1. Suggestions are outlined for patients presenting for elective surgeries taking buprenorphine. NSAIDs = nonsteroidal anti-inflammatory drugs. *Transdermal buprenorphine need not be discontinued prior to elective surgery regardless of dose.

“Elective Surgery: Still taking buprenorphine. CANCEL SURGERY”
Labor/Surgery in Pregnant Patients on Buprenorphine: Options

- Planned delivery: convert to short acting opiates and back again (U of Mich policy)
  - Stop buprenorphine, start short acting opioids at any time.
  - Resume buprenorphine after 12 hrs abstinence
- Continue buprenorphine + epidural
- +/- short acting opioids postoperatively
- SL Buprenorphine/Buprenex (IM) have been used postoperatively
Perioperative Pain Management: Macintyre Anaesth Intensive Care 2013

Acute Pain
Buprenorphine Maintenance Treatment
Accumulating Research

- Retrospective cohort of 1st 24 hours after surgery in 11 BM and 22 MM patients on patient controlled analgesia (PCA)
  - No significant differences in pain scores, incidence of nausea, vomiting or sedation
  - No significant differences in PCA morphine requirements

Authors conclude…
“results confirm that continuation of buprenorphine perioperatively is appropriate”

Macintyre PE et al. Anaesth Intensive Care 2013

PCA amount needed when MAT given postop

Perioperative Pain Management: Maclintyre

PCA amount needed when MAT given postop

http://pcssmat.org/wp-content/
PCA amount needed when MAT NOT given postop!
Patients who were on either buprenorphine or methadone during labor and delivery and postpartum were compared retrospectively.

Patients were given ketorolac (Toradol) postpartum with hydromorphone (Dilaudid) PRN.

“buprenorphine treatment will not interfere more than methadone with pain management after a C/S”.
MARKED VARIABILITY IN PERI-PARTUM
ANESTHETIC MANAGEMENT OF PATIENTS ON
BUPRENORPHINE MAINTENANCE THERAPY (BMT):
CAN THERE BE AN UNDERLYING ACUTE OPIOID INDUCED
HYPERALGESIA PRECIPITATED BY NEURAXIAL
OPIOIDS IN BMT PATIENTS?

Deepak Gupta*, Carl Christensen**, Vitaly Soskin***

Gupta D Middle East J Anesthesiol 2013 Oct; 22(3): 273-81
The current recommendation for management during labor, would be to attempt a vaginal delivery, continuing buprenorphine, and utilizing an epidural.

If additional pain medication is required postoperatively, the patient can either receive IV Toradol, or additional short acting opioids, including hydromorphone, morphine, or hydrocodone.

Although it appears counterintuitive, it has been shown that patients who continue on buprenorphine actually have lower requirements for pain medication postoperatively.

MacIntyre et al, Anesthesia Intensive Care 2013;41:222
Although it appears counterintuitive, it has been shown that patients who continue on buprenorphine actually have lower requirements for pain medication postoperatively (MacIntyre et al, Anesthesia Intensive Care 2013;41:222). This was also duplicated with the use of methadone.
Recommended management for the patient at time of discharge

- Caution: be VERY careful about giving the patient a prescription for opioids at discharge.
  - Relapse and death have occurred with ONE prescription.
- Consult with addictionist!
- Relapse rates postpartum are 40% plus!
Stan “the Man”; 2002-2018