

A close-up photograph of a pregnant woman's hands resting on her belly. She is wearing a pink hospital gown. An IV line is visible on her left arm, secured with white tape. The background is slightly blurred, showing a hospital setting.

# Pain Management in OUD during Labor and Delivery

Mary Pell Abernathy, MD, MS, MBA

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# Learning points

- Patients on MAT still need pain relief during labor and delivery.
- Shared decision making: Pain management should be provided in the safest and most effective way possible, consistent with the patient's wishes.
- Use the clinical exam rather than the patient's prescribed dose of MAT to guide pain relief during pregnancy.
- Remember to use multimodal therapy for postoperative pain management including nonsteroidal therapy (intraoperative ketorolac or IV acetaminophen, if appropriate), spinal or epidural morphine, oral acetaminophen and PCA for breakthrough pain.
- Use PCA dosing "by demand" only (no basal rate).
- Monitor patient for respiratory depression.

# Provide L&D Staff Training on Intrapartum Pain Management

- Avoid mixed antagonist/agonist preparations such as nalbuphine (Nubain), butorphanol (Stadol) and pentazocine (Talwin).
- Doulas may help with psychosocial support and pain relief.
- Continue usual dose of medication-assisted therapy during labor and hospitalization. Consider split dosing provides pain relief.
- Use neuraxial anesthesia and consider early epidural.
- Use alternative pain management: nitrous oxide, mindfulness and relaxation training, gabapentin, ketamine can be used.

# Labor analgesia

- Continue maintenance opioid agonist in labor (Methadone and Buprenorphine) in addition to other medications.
- Using epidural or combined spinal-epidural analgesia is effective, safe and helpful.
- Solutions of higher concentration of opioids may be necessary.
- One study showed women on buprenorphine needed 47% more opioid analgesic than naïve women.

# Labor analgesia

- Opioid dependence will not affect the efficacy of local anesthetics.
- Using epidural or combined spinal-epidural analgesia can help with both planned SVD and C/S. Engage anesthesia early.
- Discuss labor and pain management early (prenatally) to avoid anxiety.
- Avoid treating opioid-dependent patients with mixed antagonists and agonists (Nubain) to avoid precipitating withdrawal. Watch for w/d in patients not disclosing SUD.
- Consider dividing daily dose buprenorphine and methadone into TID or QID dosing to help with pain management.

## Post vaginal delivery analgesia

- Focus on multimodal therapies.
- Can usually be achieved with NSAIDS and acetaminophen (unless they have Hepatitis-C)
- Continue MAT at pre-delivery dose (consider split dosing).
- Watch for over-sedation.
- Use ice packs, Sitz baths and analgesia creams liberally.

## For scheduled or urgent Cesarean Section

- Regional anesthesia is preferred using spinal, epidural or combined spinal-epidural.
- Use intrathecal or epidural opioids do help but they may not be as effective in controlling pain as in non-ODU patients.
- Patient-controlled administration pumps (PCA) can be used but may require higher doses. Use as on-demand (not as a basal rate).
- Continue MAT as pre-delivery (dosing q6-8 hours may helpful with some pain relief).
- Monitor for over sedation.
- Avoid using benzodiazepines and zolpidem to decrease respiratory depression.

# Postoperative pain management

- C/S: use PCA (on-demand), scheduled regimen of nonsteroidal and acetaminophen mixed with narcotics.
- Use short-acting opioids post C/S for pain relief.
- Send home with no more than #20 (acetaminophen and oxycodone) and set expectations for refill.
- Avoid trigger medications (oxycodone alone).
- Vaginal delivery: nonsteroidal anti-inflammatory and acetaminophen preferred. Use topical analgesics for perineal pain relief.



# Postpartum support

- Set expectations prior to delivery.
- Use allied health professionals to provide in-depth and consistent follow up.
- Discuss storage and disposal of leftover medications.
- Mother-baby dyad is beneficial for both mother and baby. Advocate for low stimulation environment, nonsmoking and breastfeeding.
- Contraceptive counseling is important immediately postpartum.
- Encourage lactation counseling to promote and support breastfeeding.

# How much pain medication is really needed?

- Telephone survey of 720 post Cesarean patients at 6 academic medical centers.

- Called patients 2 weeks after discharge to gather information regarding type pain med, amount used, amount left over, pain control.

- 85% filled an opioid prescription

- 59% White race, 15% Black

- 77% Private insurance, 20% Medicaid

Bateman, et al. Obstet Gynecol 2017 Jul;130(1):29-35.

Table 2

The number of tablets dispensed, consumed, and leftover for women who filled a prescription for an opioid analgesic after cesarean delivery.

	Median	25 <sup>th</sup> –75 <sup>th</sup> percentiles	10 <sup>th</sup> –90 <sup>th</sup> percentiles	Range
<b>Tablets dispensed</b>	40	30 to 40	24 to 45	5 to 80
<b>Tablets consumed</b>	20	8 to 30	2 to 40	0 to 60
<b>Tablets leftover</b>	15	3 to 26	0 to 36	0 to 59

\*N=605; 10 patients who were dispensed an opioid were excluded from this analysis for missing data.

Table 3

Patient outcomes stratified by tertiles of the number of opioid analgesic tablets dispensed.

	Tertile Dispensed			P-Value
	≤ 30 Tablets (n=237)	31–40 Tablets (n=299)	>40 Tablets (n=69)	
<b>Satisfied or very satisfied with pain relief, n (%)</b>	200 (84.4)	252 (84.3)	56 (81.2)	0.501
<b>Patient's perception of opioid quantity dispensed, n (%)</b>				0.032
<b>Too Little</b>	35 (14.8)	29 (9.7)	6 (8.7)	
<b>Just Right</b>	134 (56.5)	179 (59.9)	33 (47.8)	
<b>Too Much</b>	49 (20.7)	62 (20.7)	25 (36.2)	
<b>Experienced an opioid-related side-effect, n (%)</b>	111 (46.8)	185 (61.9)	49 (71.0)	<0.001
<b>Required a refill of opioid, n (%)</b>	14 (5.9)	15 (5.0)	4 (5.8)	0.873
<b>Pain score at week 1, median (IQR) *</b>	4 [3, 5]	4 [2, 5]	4 [2, 5]	0.034
<b>Pain score at week 2, median (IQR) *</b>	2 [1, 3]	2 [1, 3]	2 [1, 3]	0.630
<b>Number of tablets consumed, median [IQR]</b>	15 [5 to 24]	20 [10 to 32]	32 [14 to 50]	<0.001

# Conclusions

- Median number prescribed 40.
- Median number used 20.
- Median number leftover pills was 15.
- 95% had not disposed of extra meds when asked.
- Positive association between the number dispensed and the number consumed.
- Number of opioids dispensed did not correlate with patient satisfaction, pain control, or need to refill pain medication.

# Summary

- Set expectations early and use shared-decision model for number of medications sent home with.
- Patients on MAT still need pain control, may need increased dose.
- Regional anesthesia is important. Adjuvant therapy is useful. PCA on demand only.
- Avoid agonist/antagonist combination products (Nubain/Stadol).
- Post vaginal delivery patients usually do well with nonnarcotic meds.
- Post Cesarean Section patients may need slightly more medication in the hospital but send home with lower number narcotic pills (#20).
- Post C/S patients (even not on MAT) do well with 20 narcotic pills.