Opioid Exposed Neonate Care Pathway

Monroe Carrell Jr. Children's Hospital at Vanderbilt

Consider an NAS/NOWS diagnosis for any of the following:

- *Infant requires pharmacotherapy to control symptoms*
- *Infant must stay longer than 5 days due to ongoing symptoms*
- *Infant has weight loss >10% in the setting of withdrawal symptoms*

Suspected or Confirmed in utero Opioid Exposure

Optimize non-pharmacologic care

- Low stimulation environment in caregiver's room
- Skin-to-skin if caregiver willing
- Swaddle hold
- Pacifier
- MamaRoo/swing if available
- Sound machine if available
- Provide formula supplementation - Sim Advance 20 kcal (ok to increase caloric density of formula or fortify EBM with formula if poor weight gain despite taking good volumes)
- Consider different nipple, different position, cheek/chin support
- Consider feeding eval
- Tv off if not being watched, and low volume if on
- Blinds closed/room dark while sleeping when possible
- Consider spacing out vital signs (for example, every other feed) when NOT receiving morphine

Withdrawal assessment – Eat, Sleep, Console (ESC)

Assess every 3-4 hours, after feeds. Do not wake infant to score.

- Is the infant feeding poorly? (typically <10 minutes of breast feeding or <1 ounce for infants older than 3 days, but clinical judgement required)
- Is the infant sleeping less than 1 hour?
- Is the infant unable to be consoled within 10 minutes??

A "yes" ESC assessment score indicates a yes response to at least one of the ESC questions.

Initiate Opioid Exposed Newborn Order Set (In Admission orders)

- Order cord drug screen (meconium if cord not available) ONLY IF not compliant in 3rd trimester. Drug screening not necessary if documented compliance in treatment.
- Consult lactation, breast pump to bed.
- Consult OT
- Consult Social Work
- Ensure Maternal HCV screening done AND document in chart

Prior to Discharge

- Follow up appointment with PCP scheduled prior to discharge and documentation in chart
- CHANT/NFN offered to patient and documented in chart
- TEIS referral made prior to discharge
- If diagnosed with NAS, refer to Development Clinic prior to discharge
- If maternal HCV+, refer to GI/ID Hep C Clinic prior to discharge
- If infant required any prn morphine, monitor for >/= 24 hours after last dose

Infant scores "yes" on ESC

ESC assessment score after next feed

no

yes

Notify provider and optimize nonpharmacologic care

Continue care per guideline

Give PRN dose of 0.03 mg/kg morphine PO x1

Was this the 3rd consecutive "yes" score resulting in medication?

no

yes

Initiate Level 1 morphine dosing (0.03 mg/kg) PO q3h

When initiating or increasing the dose of morphine, infants should be placed on continuous pulse ox for one hour. Remove pulse ox once safe to promote low stimulation non-pharmacologic care

Once on scheduled morphine with symptom stabilization, refer to weaning flowchart

ESC assessment score after next feed

Continue **Level 1** morphine dosing (0.03 mg/kg) PO Q3H

no

yes

Increase to **Level 2** Morphine dosing (0.06 mg/kg) PO Q3H AND **Initiate Clonidine** dosing (1 mcg/kg) PO Q6H

Eat, Sleep Console Guidelines/Tips

- Infant should not be woken up for ESC assessment
- For breastfeeding infants with feeding inadequacy, trial formula or EBM
- ESC assessments should be in the least stimulating environment
- If an infant fails any domain ESC, call a care huddle to discuss treatment
- Non-pharmacological measures should be optimized before initiating or escalating medications
- Failure of any domain should be due to opioid withdrawal and not other causes (high stimulation environment, e.g.)

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Neonatal Abstinence Syndrome (NAS) or Neonatal Opioid Withdrawal Syndrome (NOWS)

Weaning Protocol

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NAS/NOWS patient on scheduled morphine

Weaning Eligibility
- 24-48 hours after initial dose of scheduled morphine
- Symptoms have stabilized
- Infant feeding well
- Infant is sleeping between feeds
- Infant is able to be consoled
- Weight is stable or increasing
- **Continue optimization of non-pharmacologic care**

If on Clonidine, do not stop Clonidine until morphine has been weaned to discontinuation

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- Consider different nipple, different position, cheek/chin support
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- Tv off if not being watched, and low volume if on
- Blinds closed/room dark while sleeping when possible
- Vital signs spaced out (q8h or every other feed where appropriate)

If ≤ 2 Yes to E,S,C Assessment in 12 hours → Wean 10% of **INITIAL** morphine dose q8

If >2 Yes to E,S,C Assessments in 12 hours → Do NOT wean. Maximize non-pharmacological care

If 4 consecutive Yes to E,S,C Assessments → Give PRN does of CURRENT Morphine dose.

If more than one PRN dose required, return to **previous scheduled dose** of morphine or increase dose to next level as needed

May discontinue morphine once at 25% of initial dose and consistently eating, sleeping and consolable

If on Clonidine, once Morphine discontinued x24 hours, may discontinue Clonidine; this does NOT require a wean

Monitor infant for =/> 24 hours after cessation of medications
Family/Caregiver to room in during this time if possible

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Discharge Home