

Adjunctive Therapy for Neonatal Abstinence Syndrome

Predominant opioid exposure? Yes^{11,12}

If infant cannot progress to the next morphine level of treatment at any level, oral clonidine should be considered.

Start 1.5 mcg/kg/dose every 6 hours to be given with morphine dose^{12,13,14}. May be increased by 2 mcg/kg/day Q24h to a maximum of 12 mcg/kg/day^{12,13,14} if severity of withdrawal does not improve. Always use the weight at initiation for dose increase**.

Once morphine is weaned off

Wean daily dose by half every day over the next 2 days and then discontinue on 3rd day^{14,15}. Always use weight at initiation for dose decrease. If infant has rebound hypertension or tachycardia**, resume previous dose for 24 hours and attempt to wean again.

****Important note to consider**

Clonidine is an alpha-2 adrenergic agonist, therefore can cause hypotension (defined as blood pressure <5th percentile for age) and/or bradycardia (<60bpm). On the converse when weaning, can cause rebound hypertension (defined as blood pressure >95th percentile) and/or tachycardia (>200bpm), therefore monitor BP and HR Q6h.

No published studies exist on the optimal outpatient weaning of clonidine, therefore we discourage discharging infants home on clonidine.

Note: A conversation with infant's pediatrician is vital to ensure adequate follow-up if infant is to be sent home on clonidine.

Predominant opioid exposure? No

If infant has been exposed to multiple drug classes and has significant CNS symptoms, oral phenobarbital should be considered.

Starting with 10-20mg/kg/dose followed by 2-5mg/kg/day QD or divided BID to begin 24 hours later.

Phenobarbital works well for CNS symptoms but NOT for GI symptoms (you need morphine for the latter). No need to measure serum phenobarbital level unless for seizure management. Infants can be discharged home with phenobarbital and be allowed to outgrow their dose, usually takes the first 6-8 weeks of life.

TO BREASTFEED OR NOT?

Breastfeeding is generally recommended for mothers of babies with NAS unless risks outweigh benefits¹⁶. Mothers on methadone or buprenorphine should be encouraged to breastfeed unless there is ACTIVE illicit substance use, at which time mothers should be counseled on risks with active use¹⁶.

*Generally accepted contraindications to breastfeeding are HIV+/AIDS, herpes lesion on breast, active TB, human T-cell lymphocytic virus, radioactive isotope or antimetabolite exposure*¹⁶.

Refer to AAP Clinical Report on "The Transfer of Drugs and Therapeutics into Human Breast Milk: An Update on Selected Topics" for guidance if you have any questions about safety of medications in breastmilk¹⁰.

NIH also maintains an updated database (LactMed) on information of drugs and chemicals on breastfeeding mothers. All data derived from scientific literature and fully referenced.

(<https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm>)