Neonatal Opioid Withdrawal Syndrome

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Nebraska Statistics


Nebraska Statistics

CDC: Incidence of NAS in Nebraska, 2003-2013

Opioid Withdrawal in Neonates

Homeostasis vs Allostasis

Opioids
- Noradrenaline
- Acetylcholine
- Serotonin
- Dopamine
Opioid Withdrawal in Neonates

Goal of NAS Treatment
Homeostasis

Assessment of Neonatal Opioid Withdrawal

Modified Finnegan Neonatal Abstinence Scoring Tool
Goal of NAS Treatment

Homeostasis

- Any amount of breastfeeding
  - Whenever appropriate and however brief
- Rooming in
- Extended skin-to-skin contact
- Supine positioning
- Holding and Swaddling
- Quiet and Calm
  - Minimal visitors, No noise, No bright lights
- Frequent feedings and use of pacifier

Pharmacotherapy for Treatment of NAS

- Morphine
- Methadone
- Buprenorphine
- Adjunct Medications
  - Clonidine
  - Phenobarbital

Buprenorphine for the Treatment of the Neonatal Abstinence Syndrome

- Blinded Buprenorphine or Neonatal Morphine Solution (BBORN) Trial
  - Buprenorphine led to:
    - Decreased Duration of Treatment (15 days vs 28 days, difference 13 days)
    - Decreased Length of Hospital Stay (21 days vs 33 days, difference 12 days)
A Culprit Comparison of Buprenorphine versus Methadone Treatment for Neonatal Abstinence Syndrome

Eric S. Hall, PhD; Barbara T. Isomann, BSPharm; Scott L. Wincelblatt, MD; Janine Menzies-Dier, PhD; Jason R. Miles, MD; Shawn Harvey, BSN; and Henry T. Akridge, MD

- Buprenorphine was associated with a shorter course of treatment (9.4 days vs 14 days)
- Buprenorphine was associated with a decreased hospital stay (16.3 days vs 20.7 days)

Editorial

Pharmacologic Treatment for Neonatal Abstinence Syndrome Which Medication Is Best?

Elisha M. Wachman, MD; Martha M. Werler, DSc

1. Buprenorphine is associated with shorter LOT for NOWS compared with morphine, and possibly methadone
2. Methadone is superior to morphine
3. Remains unknown at the time whether buprenorphine is superior to methadone

Neonatal Abstinence Syndrome A Guide for Families

- Get Moms more resources and comprehensive, compassionate care
- Including:
  - Addiction recovery services
  - Psychological Care
  - Support
- Before, during, and after pregnancy

References and Resources


