Caring For The Infant With Neonatal Abstinence Syndrome (NAS) or Neonatal Opioid Withdrawal Syndrome (NOWS)

According to the American Academy of Pediatrics (2012), nonpharmacologic care strategies should comprise the *initial approach* to therapy in treating Neonatal Abstinence Syndrome or Neonatal Opioid Withdrawal Syndrome. NAS/NOWS is a self-limiting condition where the primary goal of the care team is to decrease symptoms without extraneous pharmacological and medical intervention. Successful management of neonatal withdrawal symptoms rests on a foundation of supportive care for mother and infant, with active participation from a multi-disciplinary care team. Evidence-based strategies include providing a calm environment with decreased visual and auditory stimuli, promoting sleep for parents and infant, providing positive proprioceptive and tactile sensory input, and maximizing nutrition to promote weight gain. Ideally, infant and family remain together for the duration of the hospital stay in a quiet, protected environment with medical and psychosocial support that continues beyond hospitalization.

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Dandle•LION products provide supportive care for infants with NAS/NOWS

Therapeutic Positioning

The **Dandle® WRAP Stretch** is designed to support irritable, hard-to-console babies. The lightweight, moisture-wicking fabric reduces discomfort from overheating and sweating. The high-performance material allows movement while providing 360° proprioceptive input, mimicking the intrauterine environment through calming containment. The degree of containment can be customized with hook and loop tabs. The **Cozy Cub™** is a weighted bean bag positioner that provides extra stability and security for irritable infants. It can be molded and moved to provide containment and functionality where the baby needs it most.

Therapeutic Touch

Infant massage provides babies with a positive tactile experience that promotes proprioception and encourages development of a sense of "self". **Nurturing Massage Oil** was developed for the most sensitive skin and the pH balanced complex of organic ingredients create an ideal glide for massage. The specifically-selected and clinically proven oils are rich in essential fatty acids and nutrients.

Protective Environment

Swaddled, immersion bathing promotes temperature stability and creates a relaxing and calm experience for irritable babies. Swaddled bathing has been shown to decrease crying and increase parental involvement. The **Dandle•LION® Bathing System** allows parents and staff to safely and easily provide a calming, nurturing bathing experience. Care providers may feel less hurried and parents may feel more confident providing swaddled baths.

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Functional Assessment

Functional assessment, as compared to traditional numeric scoring tools, has been shown to reduce medication dosing and decrease length of stay when combined with non-pharacologic interventions as a first line treatment (Grossman, et al. 2017).

Can the baby eat?
Can the baby sleep?
Can the baby be consoled?

- If so, symptoms are considered "well-managed" regardless of numeric withdrawal score, and supportive care strategies should continue.
- If not, pharmacologic interventions should be considered in addition to supportive care.

Family-Centered Team Approach

Acknowledge, encourage, and facilitate active involvement of all family members and the multi-disciplinary team.

- Treat the maternal/infant dyad rather than the infant alone.
- Recognize positive parenting efforts.
- Provide education on infant cues, newborn care and soothing techniques.
- Use supportive, non-judgmental language

Supportive Care in a Protected Environment

Supportive care should be provided regardless of the level of pharmacologic intervention.

- A dark, quiet environment close to mom.
- Effective consoling by parents, team members, and volunteers.
- Supportive positioning and the 5 S's of soothing (Swaddle, Shush, Swing, Suck, Side or Stomach position) to promote state organization and self-regulation.
- Non-nutritive sucking.
- Skin-to-skin holding with parents.
- Infant massage to provide proprioceptive input and relax hypertonicity.
- Skin protection to prevent diaper dermatitis.
- Adjunct therapies to decrease intensity of withdrawal symptoms:
  - Swaddled bathing.
  - Use of swing in a slow mode.
  - Acupuncture, acupressure, Reiki, aromatherapy.

Nutrition and Feeding Practices

Nutritional needs are complex in terms of what and how to feed.

- If mother is stable on methadone or buprenorphine maintenance, use mother's own milk (MOM). Using MOM can reduce NOWS scores and the need for pharmacologic therapy.
- Consider donor milk when MOM is unavailable.
- Small, frequent feeds may reduce reflux while satiating sucking need.
- Provide for increased calories if needed.
- Use slow-flow nipples.
- Provide supportive positioning and containment to minimize disruptive feeding behaviors.

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