

Dr. Brown's Medical Webinar

Ramya Kumar\_The Late Preterm Infant: Do a Few Weeks Really Matter

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**Q: Do you feel it's appropriate to have a standard PT/OT order on postpartum unit for late preterm infants?... what age if so. ...**

I think it is definitely appropriate to have therapy orders across the motor and feeding domains if your staffing model can support the orders that come in. Having orders for all babies under 37wks would be great, if possible, along with other inclusion criteria like syndromes, shoulder dystocia etc. Some of our 37-40wk babies have needs as well, however starting with under 37wks lets you build a presence on the unit and eventually as the medical and nursing teams learn what neonatal therapists bring to the table your order set may expand. If your staffing model does not support seeing all the babies you get orders on, you could participate in unit-wide education. Educating and empowering other members of the care team to provide neuroprotective care has a ripple effect.

**Q: There is new thought to decrease swaddling to increase the startle reflex to promote regulation. This is a new PT strategy I've seen in ours and other NICUs ...Have you heard of this and is there any validity to it?**

I am not familiar with the concept of increasing the startle reflex to promote regulation. It seems a little counterintuitive since the moro reflex is associated with our sense of fight or flight and the activation of the HPA axis (Hypothalamic-Pituitary-adrenaline axis) which is a defense mechanism to protect ourselves against adverse or potentially harmful influences in the surrounding environment. Increasing the startle reflex would in turn increase the state of stress and fight or flight which would not really promote regulation.

I have seen some pediatricians and therapists recommend swaddling with arms to the side to AVOID eliciting the startle reflex which in turn may wake the baby up. And there is some talk in the community of pediatricians that swaddling with hands down limits the baby sliding out of the swaddle and then the loose swaddle blanket becoming SIDS risk. I have recently been hearing that this was mentioned in the American Academy of Pediatrics Safe Sleep Guidelines, however when I looked into this all I found was the following:

“There is no evidence to recommend swaddling as a strategy to reduce the risk of SIDS. Swaddling, or wrapping the infant in a light blanket, is often used as a strategy to calm the infant and encourage use of the supine position. There is a high risk for death if a swaddled infant is placed in or rolls to the prone position.[120-144-145](#) If infants are swaddled, always place them on the back. Swaddling should be snug around the chest but allow for ample room at the hips and knees to avoid exacerbation of hip dysplasia. Weighted swaddle clothing or weighted objects within swaddles are not safe and therefore not recommended. When an infant exhibits signs of attempting to roll (which usually occurs at age 3 to 4 months but may occur earlier), swaddling is no longer appropriate because it could increase the risk of suffocation if the swaddled infant rolls to the prone position.[120-144-145](#) **There is no evidence with regard to risk of SIDS related to the arms being swaddled in or out. Parents can decide on an individual basis whether to swaddle and whether the arms are swaddled in or out, depending on the behavioral and developmental needs of the infant.**”

The AAP also recommends: Infant sleep clothing, such as a wearable blanket, is preferable to blankets and other coverings to keep the infant warm while reducing the chance of head covering or entrapment that could result from blanket use.

<https://publications.aap.org/pediatrics/article/150/1/e2022057990/188304/Sleep-Related-Infant-Deaths-Updated-2022>

In my experience and training, swaddling in a way that promotes flexion and hands to midline is more developmentally supportive. In the late preterm infant we also want to think about the swaddle as an extension of the womb that the baby would have had. Allowing for space to brace and recoil is a critical component of sensorimotor development. Thermal regulation is another important factor in this population. Hypothermia is one of the leading challenges that the late preterm infant faces which then snowballs into other sequelae like respiratory distress, poor feeding etc.