

## **Moving Beyond the Basics: Neurodevelopmental Positioning in the NICU**

### **Questions and Answers from Chrysty Sturdivant, OTR**

Q: Debra Seal from Cedars Sinai Medical Center: Do you have experience using the sleep sack?

A: No, but I have seen them before. Just remember the principal of providing posterior pelvic tilt and also supporting lower extremities in flexion while allowing movement. Some of these products tend to allow infant's to extend and then remain in this posture as their resting position.

Q: Jodie L Storhaug from Grand Forks: would you address head positioning in prone?

Q2: Nicolle Davidson from Iowa: what is the best way to support the infant, and especially the head, during the prone position?

A: I try and alternate the infant's head from left and right so that I am not creating muscle memory in one direction or tightness at the head/neck. Be sure your tubing and interface do not pull on the head and neck in the unwanted direction.

Q: Kathy Foley from Sacramento, CA: What is your experience with Z-flo positioners ?

A: I have used Z-flo as a head/neck support and the mattress for post surgical or infants who are in static positions.

Q: Chris Auer from UC Health: How can early breastfeeding experience enhance muscle memory and not create anxiety in the parent moving them toward wanting to practice bottle feeding instead?

A: In my feeding practice, we encourage mothers to breastfeed for initial feeding and continue as often as they can be available. We have seen a huge success in parent satisfaction and less anxiety when an infant or cue based program is encouraged.

Q: Kat Jackson from Dallas, TX: What are all the products depicted in the presentation that you recommend or use.

A: I showed the Dandle ROO and Dandle WRAP, blankets, gel products, Z-Flo, and Snuggle Ups.

Q: Lois Holzemer: How best to translate these lessons to going home and teaching safe sleeping?

A: We begin to transition infants out of hospital products when they move to open crib. We start teaching back to sleep positions and safe sleeping along with tummy time activities.

Tummy time instructions and use of "containers" (infant seats, car seats, swings) are vital information for parents in facilitating early developmental milestones. Examine your practice and involve your neonatal therapists in this role!

Q: Margaret A. Miklancie from Virginia: Clancy from Georgetown University hospital - I now understand the importance of "Muscle Memory" ...if I do my best on my shift, but nurses after do not, will my efforts make a difference?

A: Your efforts do make a difference! The infant is relying on you to help with that memory! Some is better than none. You can also take the message back to your hospital and group.

Q: Elaine Johnson from Miller Children's Hospital: Do you use positioning devices when the infant is in a crib?

A: Generally moving to a crib is a signal for our staff to remove positioning aids, however we do use the Dandle WRAP for babies who still have low tone in the lower extremities. We find that most of our babies born before 28 weeks still have problems in this area.

Q: ANGELA LARUFFA from CINCINNATI OHIO: Do you have any positioning recommendations during kangaroo care?

A: Yes and glad you asked! Positioning and postural principals can be applied to any position, handling or kangaroo care. Review the postural positions for correct alignment and provide gentle hand swaddle or cupping to help settle your baby, if needed. Your hands may cup head and lower extremities in flexion.

Q: Monty Anderson from Kaweah Delta Medical Center: How could we help nurses to discontinue the practice of tightly swaddling infants?

A: It is really important the nurse consider the gestational age, the baby's medical condition and their developmental needs when considering swaddling and positioning. Tight swaddling may be appropriate for NAS babies, for inconsolable babies, for babies who are frantic and require assistance with control. However, as the baby develops, the research shows that it is important to give the baby the ability to move and develop muscle memory while still supporting a flexed and midline position. There is a progression from tightly swaddled to open crib and we need to provide opportunities for the baby to gain competency, develop tone and muscle and create the muscle memory needed for later development.

Q: Deborah Meloy from Vanderbilt Children's Hospital: Is there a certain amount of resistance which positioning devices need? Bendy rods versus blanket rolls.

A: Positioning devices should have some "give" that allows the baby to move and stretch, yet support them back into flexed and midline. Think about a baby in utero as an example of an optimal way to position.

Q: Roberta Thomas from Nationwide Children's: what is a wrap?

A: Sorry...I was referring to the Dandle WRAP, a product we use in our NICU.

Q: Jodie L Storhaug from Grand Forks: I saw in the picture that you used the bendy curved over the top of the head with the Snuggle Up at the lower end. Would you say you more often do include a boundary at the top? I had more often been using the Bendy with the curve at the feet end but am rethinking this, having listened to your lecture.

A: I find most babies do better with containment at the head and feet, again, just like they would be getting in utero. It is calming to have containment and it prevents them from “shooting out” of the positioning aid. It also gives proprioceptive feedback.

Q: Freddy Echiverri from San Antonio: Will you address thermal regulation with the ROO and to be more observant of it?

A: When a baby is swaddled in a blanket or a positioning device, the nurse should be aware that he may require less thermal support. The extra layer(s) of fabric will keep the baby warmer and the fact that the baby is contained and probably less agitated will help him maintain his own temp better as well. We recommend the nurse check the baby’s temp more frequently when a baby is put in a positioning aid, and adjust the set point of the incubator until a good balance is reached. As the baby becomes more competent, we also find the baby’s temp will become more stable and we often turn down the set temp on the incubator even lower.

Q: Garnet Martinez, Lauren Mattaliano from St. Joseph and Megan Kaufman from Altru Health System: Will we be able to get a copy of the slides?

A: “I am so happy you enjoyed the presentation! And we’re thrilled that DandleLION was able to provide you with such a quality presentation and CEU for free! We appreciate that you want to share this info with your unit. And soon you’ll be able to do just that!

I will be releasing this presentation later this summer. This product will be available at [www.neonataltherapysolutions.com](http://www.neonataltherapysolutions.com) in the near future. So stay tuned!

In the meantime, please feel free to go back and listen to the recording any time/as many times as you want by going to [www.dandlelionmedical.com](http://www.dandlelionmedical.com) and clicking on the webinar link.

**COMMENTS:**

- Kathleen Gray from Oakland, CA: Very interesting points about "movement" Makes sense. Thanks
- Jodie L Storhaug from Grand Forks: Thank you very much for making this available to us. What a nice format for learning.