Interview

In this new feature, Neonatal Intensive Care interviews clinicians and healthcare providers about the actual application of specific products and therapies. Our premiere interview is with Andrew Slezak, MEd, RRT-NPS, Neonatal Clinical Education — St Joseph's Women's Hospital, Tampa, FL, discussing his hospital's use of the Neo-Tee by Mercury Medical.

Laszlo Sandor: What areas/departments could the hospital benefit from using the Neo-Tee?

Andrew Slezak: The most value comes from the use of the Neo-Tee in the delivery room. With so much unpredictability in the delivery of a newborn, it is extremely valuable to have a single device that can provide both CPAP for slow transitions and consistent ventilation in emergencies. This is especially true with our premature neonates. Having a Neo-Tee at the bedside for our NICU patients gives us the ability to respond quickly to apneas, bradycardic episodes, and other respiratory emergencies. Using a Neo-Tee allows the therapist to alter the level of support needed quickly while also providing a safer mode of resuscitation for our bedside nurses. A flow-inflating resuscitation bag needs skill and experience to operate safely while the Neo-Tee allows someone with little experience to still give consistent pressures during resuscitation (other than occluding the hole for the respiratory rate and not releasing).

LS: How many L&D and NICU beds does your facility have? **AS:** A 64-bed NICU and a 22-bed L&D.

LS: How does the Neo-Tee assist clinicians in providing better patient outcomes?

AS: It reduces the risk of barotrauma during positive pressure delivery by providing consistent pressures during each breath. Due to its simplicity, it allows delivery team members to concentrate on other aspects of resuscitation by taking the guess work out of the breathing equation. With a flow-inflating resuscitation bag, the clinician must concentrate on squeezing the bag appropriately each breath. That's 40-60 breaths a minute!

LS: Do you see a benefit by having a manometer at the patient interface (on the Tee)?

AS: It allows the clinician to check the peak pressure/PEEP while also observing the quality of the seal for the mask and the appearance of the baby. Having a manometer attached to the care center can be distracting and requires the clinician to remove his/her eyes from the baby.

LS: Many clinicians have stated that feeling "lung compliance" with a resuscitation bag is very important. What are your thoughts on this considering that Neo-Tee does not allow for the "feel"?

A5: I do consider this to be a drawback from this device. The Neo-Tee is very mechanical and doesn't allow the clinician to get a feel for what is going on inside the lungs. The flow-inflating resuscitation bag has a distinct advantage in this way, but there are ways to counter this problem. Listening to breath sounds, observing chest rise are still reasonable measures of assessment.

LS: Has the Neo-Tee prevented intubations that may have occurred by the use of other resuscitation devices? If so, how does this help support reducing healthcare costs? (Can an actual dollar savings be applied to your facility?)

AS: The Neo-Tee has helped by way of transporting the baby from the delivery room to the NICU. The Neo-Tee doesn't need to be held on the ETT while squeezing the bag, which can cause the ETT to become dislodged. The Neo-Tee makes it easy to hold the airway in place while also providing consistent breaths during ventilation.

LS: How has Neo-Tee helped your department with respect to infection control?

AS: We've reduced the number of devices required from delivery to bedside emergencies. Having one device that is disposable reduces your chance for infection versus having two or more devices opened and being used.

LS: What else can you tell us about the Neo-Tee that you hadn't mentioned, but has been beneficial and would be valuable for other clinicians to know?

A5: It helps to have a device that can't be easily manipulated or damaged during a chaotic resuscitation or emergency. PEEP valves and flow restrictors can be moved or changed during hectic procedures. The Neo-Tee is always consistent.

Laszlo Sandor is assistant editor of Respiratory Therapy. Input on questions was provided by Scott Horowitz, Product Manager, Mercury Medical. If you would like to participate in this feature, as a company or healthcare provider, please contact Steve Goldstein at s.gold4@verizon.net.