

AUTHOR'S REPLY

We appreciate the readers' critical appraisal of our study by reader. Maternal antibiotics were administered only for medical or obstetric indications such as Premature rupture of membranes (PROM), and chorioamnionitis. The frequency of PROM was comparable in the two groups. Use of antibiotics was restricted to those who had a diagnosis of probable or definite sepsis; the proportion of such babies being 43.9% in the aggressive group and 65.9% in conservative regimen ($P=0.16$). Delayed cord clamping and use of probiotics were not in practice during the study period. The low occurrence of NEC rates in the

present study could be due to several reasons. The study enrolled neonates ≤ 750 g birth weight, and none of them were < 26 weeks. These are the neonates at the highest risk of NEC. Further, mortality in the present study was much higher compared to Vermont Oxford data or ADEPT cohort with few extremely preterm survivors. Neonates who survived had a mean (SD) gestation 32 (2.2) weeks compared to those who had died 29 (2.5) weeks.

MANOJ MODI

*Department of Neonatology,
Sir Ganga Ram Hospital,
New Delhi, India.
drmanojmodi@gmail.com*

Can Small for Gestational Age Status Affect the Weight-based Formula for Calculation of Insertional Length of Endotracheal Tube in Neonates?

The normative data for placement of endotracheal tube published recently in Indian Pediatrics [1] paves the way for a less invasive alternative of diagnosing a very commonly encountered issue of endotracheal tube (ET) malposition, that too in a time bound manner. However, we have the following queries:

1. The anatomical measurements of larynx and trachea based on gestational age of a neonate are considered to be more accurate than the weight-based measurements as the later can be influenced by intrauterine growth retardation [2] e.g., a 28 weeks, 700 grams small for gestational age (SGA) neonate will have a lengthier larynx and trachea compared to a 26 weeks appropriate for gestational age (AGA) neonate of the same weight. This issue is of more significance in countries where the incidence of SGA is high [3]. Approximately, 20% of the neonates in this study [1] were SGA. We would like to know if these SGA neonates were excluded while calculating the weight-based formula for ET tube insertion depth?

2. The authors have calculated the sample size based on a pilot study including only two groups of neonates based on weight alone (< 1500 g and > 1500 g). However, in the final results, they have provided nomograms for multiple subgroups based on weight as well as gestational age. We

would like to point out that based on the calculated mean and SD of some of these subgroups, the required sample size falls short in some of them.

3. While deriving the regression equation for insertion length from the various anthropometric parameters, mean age of enrolment at baseline, which might determine some of the factors affecting the head circumference such as caput succedaneum, cephalhematoma and subgaleal bleed, was not mentioned [4]. Moreover, amongst the enrolled neonates, almost 75% are males. As female neonates are constitutionally smaller compared to their male counterparts, can these nomograms be extrapolated to female neonates?

**VIRARAGHAVAN VADAKKENCHERRY RAMASWAMY¹
AND ANCHALA SINGH²**

*From ¹Department of Neonatology,
Nori Multispeciality Hospital,
Vijayawada, Andhra Pradesh; and
³Department of Pediatrics, AIIMS,
Gorakhpur, Uttar Pradesh; India
119.vira@gmail.com*

REFERENCES

1. Singh P, Thakur A, Garg P, Aggarwal N, Kler N. Normative data of optimally placed endotracheal tube by point-of-care ultrasound in neonates. *Indian Pediatr.* 2019;56:374-82.
2. Kempley ST, Moreiras JW, Petrone FL. Endotracheal tube length for neonatal intubation. *Resuscitation.* 2008;77:369-73.
3. Lee ACC, Katz J, Blencowe J, Cousens S, Kozuki N, Vogel JP, Adair L, *et al.* Born too small: National and regional estimates of term and preterm small-for-gestational-age in 138 low-middle income countries in 2010. *Lancet Global Health.* 2013;1:e26-36.
4. Klariæ AS, Rajiæ MT, Crnkoviæ HT. Timing of head

circumference measurement in newborns. *Clin Pediatr (Phila)*. 2014;53:456-9.

AUTHORS' REPLY

We thank the readers for critically evaluating our research study [1]. The queries raised are addressed below:

1. Small for gestation age (SGA) infants are anatomically and physiologically distinct from appropriate for gestational age (AGA) infants [2]. However in our study, on calculating regression equation predicting insertional length (IL, in cm) from the weight (kg) among AGA and SGA neonates, the results remained similar (both regression coefficient and intercept) as follows:

$$\text{IL (overall population, cm)} = \text{wt (kg)} + 4.95$$

$$\text{IL (AGA population, cm)} = 1.1 \times \text{wt (kg)} + 4.928$$

$$\text{IL (SGA population, cm)} = 1.1 \times \text{wt (kg)} + 4.922$$

2. We accept that the sample size required in different groups (calculated *post hoc* from our results) is more than the number of infants enrolled. However, there was no prior study that had reported gestation or weight-based normograms of optimally placed endotracheal tube on ultrasound to guide us. Therefore, we conducted a pilot study on 15 infants in two weight categories. To derive adequate sample size in five weight categories and four gestation categories, a pilot study would require about 80-100 infants, which was not feasible for us.

3. Median (IQR) day of enrollment of the neonates was 3 (1-9) days. None of the study subjects had cephalhematoma or subgaleal bleed. Neonates with caput succedaneum enrolled on day 1 had their head circumference measurement repeated after 48 hours of life, not only for our study but also as a standard clinical protocol because resolution of caput succedaneum takes few days [3]. We agree that our study had male preponderance and the possibility of calculating sex-specific normative data of optimally placed endotracheal tube on ultrasound based on adequate sample size needs to be explored.

ANUP THAKUR AND NEELAM KLER*

*Department of Neonatology,
Institute of Child Health,
Sir Ganga Ram Hospital,
New Delhi, India.
drneelamkler@gmail.com

REFERENCES

1. Singh P, Thakur A, Garg P, Aggarwal N, Kler N. Normative data of optimally placed endotracheal tube by point-of-care ultrasound in neonates. *Indian Pediatr*. 2019;56:374-82.
2. Saenger P, Czernichow P, Hughes I, Reiter EO. Small for gestational age: Short stature and beyond. *Endocrine Reviews*. 2007; 28:219-51.
3. Walker PV. Newborn evaluation. In: Gleason CA, Juul SE, editors. *Avery's Diseases of the Newborn*. Philadelphia: Elsevier; 2017:289-311.e1. Available from: <https://www.clinicalkey.com/#!/content/book/3-s2.0-B9780323401395000255>. Accessed May 30, 2019.

Perivable Birth – The Ethical Conundrum: Few concerns

The article by Nimbalkar and Bansal [1], published recently in *Indian Pediatrics*, must have caught attention of many clinicians. We were looking forward to discussions around real time delivery room dilemmas in day-to-day life as well as some operational working algorithms/flowcharts that would help making decisions easier in such difficult situations. Through this communication, we have tried to complement the content in this article. Nevertheless, we agree with the author that there is an imminent need to collect our own outcome data in extreme preterm infants to enable framing national guidelines for management of perivable babies.

1. In the section on “The Ethics of Decision-making in the Delivery Room” authors have made a generic discussion around the principles of ethics rather than some practical ethical dilemmas faced by a clinician in a delivery room.
2. At the outset, it may have been good to define a ‘live birth’, What are ‘signs of life’, what constitutes providing either ‘full life support’ or ‘comfort care’ *etc.* While the Neonatal Resuscitation Program (NRP) guidelines mention first examination of ‘Heart Rate’ after the end of initial steps, do we really examine heart first when dealing with difficult situations of perivability to assess signs of life?
3. Authors have majorly (and infact theoretically rightly so) used gestational age (GA) cut-offs as the main guiding criteria that dictate decisions and actions in tricky situations around perivability. But surely such