

*In Reply:*

We thank Dr. Dunn for his interest in our case report. In response, Dr. Dunn erroneously states that we noticed “a higher than expected incidence of stridor after using the Microcuff® endotracheal tube in neonates.” We made no such claim or statement.<sup>1</sup> We found it enigmatic that Dr. Dunn referred to a 20-cm H<sub>2</sub>O air leak around a tracheal tube as a “standard of care.” First, the presence of an air leak depends on the head position and degree of paralysis as much as it does on the tube fit.<sup>2</sup> Second, the leak pressure is not reproducible as a 38% difference between experienced anesthesiologists has been reported.<sup>3</sup> Third, the study cited by Dr. Dunn stated that in selecting the appropriate size tube in infants with age less than 1 yr, either “resistance to passage of the initial tube into the trachea, or ... an audible leak when the lungs were inflated to a pressure of 20–30 cm water” was used with apparent equipoise.<sup>4</sup> We presume then he agrees with our practice that a tube that passes the subglottis without resistance is the correct size, as described in our report.<sup>1</sup> Returning the 0.5 ml of air, which was evacuated from the packaged cuff to the cuff as described in two of the cases in our report, did not substantively change the shape or pressure within the cuff of these tubes as we determined *in vitro*. Fourth, the incidence of stridor after leak pressures of 40 cm H<sub>2</sub>O or more in children (twice that recommended by Dr. Dunn) was zero in one study on 200 children or more and 0.1% in the second of 5,000 children or more.<sup>3,5</sup> In fact, several studies have reported postextubation stridor after leak pressures between 10 and 40 cm H<sub>2</sub>O without consistent results. Fifth, the “leak test” emerged from the pediatric intensive care unit to attenuate the incidence of stridor postextubation, although recent evidence suggests that stridor occurs with a similar incidence in children at a leak pressure of 20 and 30 cm H<sub>2</sub>O and that a leak test at 40 cm H<sub>2</sub>O in critically ill children does not predict extubation failure.<sup>6</sup> Surprisingly, the leak test is not used at all to size uncuffed tracheal tube for infants in several neonatal intensive care units that we canvassed. We believe this evidence repudiates the “leak test” as a “standard of care” for tracheal tube size in infants. In sum, we urge practitioners to follow the published guidelines and manufacturer’s recommendations for sizing these tubes according to the patient’s age and weight, and to limit the use of these tubes in neonates and infants to circumstances that warrant a cuffed tube, until further studies establish their safe use.

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## Standard Kaolin-active Thromboelastography Cannot Detect Platelet Inhibition by Clopidogrel

*To the Editor:*

In the March 2013 issue of *ANESTHESIOLOGY*, Dr. Ahn *et al.*<sup>1</sup> present a thorough and informative review of pain-associated respiratory failure. The review is based on a case report describing a 79-yr-old man with bilateral chest trauma, in whom the treating team decided to use epidural analgesia. This is not an uncommon scenario; however in this case, the patient was taking clopidogrel as prophylaxis after the placement of bare-metal coronary artery stents.

As stated in the article, there is little in the way of evidence to guide epidural placement in patients taking antiplatelet agents; furthermore, the response to these agents demonstrates inpatient variability. The treating physicians used standard coagulation parameters and thromboelastography to assess coagulation before insertion of the epidural catheter.

It is my contention, supported by published data, that none of the tests performed on this occasion could have adequately assessed the contribution of clopidogrel to coagulopathy in this patient. Standard kaolin-activated thromboelastography in particular will not reflect any platelet inhibition that is caused by clopidogrel, as the thrombin generated in the sample is enough to fully activate platelets even when pathways reliant on adenosine diphosphate or arachidonic acid are blocked. This topic is more fully covered in an excellent review by Gibbs.<sup>2</sup>

The effect of clopidogrel on a blood sample can be assessed with the thromboelastography equipment using Thromboelastography Platelet Mapping™ assay<sup>3</sup> or with other proprietary tests.

I have no qualms with the use of epidural analgesia in this patient; the possible risk of hematoma was balanced by the