Cuffed Endotracheal Tubes Are Okay for Neonates

To the Editor:

I have read the article by Sathyamoorthy et al. and was surprised to hear that they have noticed a higher than expected incidence of stridor after using the Microcuff (Kimberly-Clark, Roswell, GA) endotracheal tube (ETT) in neonates. They reported that on three neonates who after being intubated with these cuffed ETTs, each had significant postoperative stridor. Most interesting to me was that in each of the cases, no attempt was made to establish whether there was a functional leak at ventilation pressures above 20 cm H2O after intubation. In two of these cases, air was injected into the ETT cuff, and still no measurement was made as to how much ventilation pressure the tube sealed at. After intubation in all pediatric cases, it has always been the standard of care to make sure that the ETT leaks above 20 cm H2O to ensure that the tube is the correct fit. This is regardless of whether you are using a cuffed or uncuffed ETT. The only difference being that when using a cuffed ETT, you select a smaller size than the traditional formula and inflate the cuff pressure of the Cohen, Arndt, and the Uniblocker is between 30 and 40 cm H2O. If the cuff of the EZ-blocker has a high pressure of 110 cm H2O, I would advise caution when using the EZ-blocker for an extended time to avoid the risk of mucosal damage if the bronchial venous circulation is compromised.

No device is perfect. Anesthesiologists should be familiar with the advantages and the disadvantages of each device and select the one that is best for his/her patient.

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References


(accepted for publication June 19, 2013.)