prospective and retrospective studies that would allow for the control of comorbidity and variations in anesthetic management, the examination of effects according to surgical procedure, the determination of effect by LD type, and more comprehensive measures of academic achievement, cognitive/memory functions, and quality of life. This study represents an initial attempt at unraveling this complex and difficult issue. Other studies planned and currently under way will, no doubt, add to the slowly accumulating body of clinical data that we hope will help to resolve this important and difficult issue.

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References

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The Need for Perspective

To the Editor—We were disappointed that ANESTHESIOLOGY chose to publish the articles by Kalkman et al. and Wilder et al. without an accompanying cautionary editorial. Kalkman et al. state, “children undergoing urologic surgery at age less than 24 months showed more behavioral disturbances . . . although the results were not statistically significant.” We disagree with this statement; namely, because statistical significance was not achieved, more behavioral disturbances were observed. Furthermore, they go on to perform a sample size calculation to determine the number of patients that would be required to detect a statistically significant effect of the effect size they found. Their estimate for such a potential association between anesthesia and behavioral problems could be explained by chance alone, and using such an estimate to guide future studies is misleading. Wilder et al. were unable to separate out the effects of multiple anesthetics from the effects of the underlying clinical problems requiring multiple procedures. By publishing these two studies as part of a larger series including several animal models, ANESTHESIOLOGY seems to send the message that two independent teams reported similar findings in anesthetic exposure to anesthesia and learning disabilities in a population-based birth cohort. ANESTHESIOLOGY 2009; 110:790–804
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In Reply.—We thank Dr. Raghunathan et al. for their letter regarding their disappointment that we did not publish a cautionary editorial regarding the reports by Wilder et al. and Kalkman et al. in the April issue of ANESTHESIOLOGY. These clinical articles, which were published with laboratory work presented at the ANESTHESIOLOGY/Foundation for Anesthesia Education and Research session at the 2008 Annual Meeting of the American Society of Anesthesiologists, were accompanied by an editorial by Drs. Patel and Sun, thought leaders in research regarding the mechanisms and clinical relevance of neurodevelopment after exposure to anesthetics. Regarding the clinical article, they concluded in their editorial, “Although two retrospective studies herein suggest that a correlation between anesthetic exposure early in life is associated with learning and behavioral abnormalities later in life, the data cannot be considered to be evidence of the existence of anesthetic neurotoxicity in humans. The absence of rigorously conducted prospective randomized trials precludes recommendations on clinical..."