Anesthesiology 2009; 111:1386

To the Editor—We were disappointed that ANESTHESIOLOGY chose to publish the articles by Kalkman et al.\(^1\) and Wilder et al.\(^2\) without an accompanying cautionary editorial. Kalkman et al.\(^1\) 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 not 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 anesthetic and behavioral problems could be explained by chance alone, and using such an estimate to guide future studies is misleading. Wilder et al.\(^2\) 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 a large set of data. The authors state, “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.

References

(Accepted for publication July 31, 2009.)