Three Editorials—Three Historical Allusions

To the Editor.—I enjoyed three of the editorials in the December 2008 issue of ANESTHESIOLOGY, because each one alluded to events in the history of anesthesia. In the first one I read, Orser and Saper argued that the *quid pro quo* for exiting the current ‘ether era’ is tied to identifying the neural circuits and receptors responsible for the anesthetic state and designing new anesthetic drugs that are more focused in their action.1 In the second, the effects of nitrous oxide and xenon on N-methyl-D-aspartate and α-amino-3-hydroxy-5-methyl-4-isoxazolepropionate receptors in the amygdala were compared. According to Hemmings and Mantz, the differences between the two inhaled agents ‘are no laughing matter’—a very nice allusion—both to the early use of nitrous oxide as a laughing gas at public demonstrations and medical student frolics in the early 1800s and to the ‘failed’ public demonstration of nitrous oxide for surgical anesthesia by Wells, contrasted with the successful administration of ether in this setting by Morton and the subsequent declaration by the surgeon Warren, ‘Gentlemen—this is no humbug.’—James C. Eisenach, M.D., Editor-in-Chief.

I thank Professor Roy for his interesting comments regarding our recent article.1 To continue the historical allusion, in 1822 Dr. Buchan, a Scottish physician, wrote: ‘It is really astonishing, that so little attention should in general be paid to the preservation of infants. What labor and expense are daily bestowed to prop an old tottering carcase for a few years while thousands of those who might be useful in life perish without being regarded!’2 Since then infant mortality has certainly improved, at least in the developed world, but in 2009 a large treatment of general inhalational anesthesia, such as the mortality rate attributed to chloroform and the technical problems involved with inhaling ether.3 If we look at 50-yr snapshots, we see anesthesia for frolics in the 1800s replaced by inhalational anesthesia for surgery in the 1850s, spinal anesthesia emerging in the 1900s, a preference for general anesthesia in the 1950s, and now spinal anesthesia as the ‘less neurotoxic’ control group. We have clearly made improvements in both approaches to anesthesia. More importantly, we have become much more rigorous and demanding in what we consider safe anesthesia.

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References

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In Reply.—I thank Dr. Roy for his thoughtful integration of the three editorials.1–3 His broad overview of the evolution of anesthetic practice highlights two important points. As a result of the hard work of our forefathers, we have developed a remarkable understanding of ‘what anesthetics do.’ These insights have produced unprecedented advances in patient safety, primarily as a result of improved monitoring and drug delivery systems. However, we are also reminded that we still don’t understand ‘how anesthetics work.’ This lack of knowledge has resulted in a paucity of radically new anesthetic drugs which, in turn, has contributed to a plateau in anesthesia-related mortality.4 The specialty of anesthesiology must be ambitious and relentless in its efforts to develop safer anesthetic drugs and improved drug administration strategies. This effort will require a firm commitment to train young investigators who will bring the best science to bear on this important goal.

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References

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