

## CORRESPONDENCE

tion" to "paresthesia during needle insertion or pain during injection." It is logical to conclude, after doing one arithmetic operation, that we found this to be associated with 92% of the neurologically injured patients who received bupivacaine.

After constructing table 1, Drs. Price and Carpenter ask, "are these data sufficient to support speculation regarding risk for nerve injury?" A more relevant version of their table 1 would be the following, which restates data presented in the "Neurologic Complications", section of our paper.<sup>3</sup> The table herein suggests that yes, there is reason to speculate that 5% lidocaine causes nerve injury.

We are concerned about the intensity with which Drs. Price and Carpenter seek to counter this important message of our study: that lidocaine toxicity *might* exist. They state that "it is certainly possible that lidocaine was chosen more frequently . . . in a high risk patient population." However, this is entirely speculation on their part. Although it is mathematically possible, it has no factual basis.

Drs. Price and Carpenter essentially congratulate us for gathering enormous amounts of uninterpretable data. However, we believe it is important to note that both of these people represent Astra USA, which manufactures lidocaine. Dr. Carpenter also has protested previously the notion of lidocaine toxicity,<sup>4</sup> even before our study was conducted. He wrote, criticizing an earlier study by others, that (1) "This study . . . fails to clearly identify lidocaine as the cause for . . ."; (2) "Astra has taken a proactive approach to this controversy"; and (3) "I plan to continue to use hyperbaric lidocaine." Because Drs. Price and Carpenter clearly believe that the available information is insufficient, a logical final question is whether Astra, which funds expensive studies of new molecules, is also willing to fund the extraordinarily expensive, "high-quality" clinical studies that they seem to believe are needed to address a problem with an "old molecule" such as lidocaine?

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## References

1. Smith RL: Observational studies and predictive models. *Anesth Analg* 1990; 70:235-9
2. Duncan PG: That was then, this is now! the value of observing change. *Anesth Analg* 1998; 86:225-7
3. Auroy Y, Narchi P, Messiah A, Litt L, Rouvier B, Samii K: Serious complications related to regional anesthesia. Results of a prospective survey in France. *ANESTHESIOLOGY* 1997; 87:479-86
4. Carpenter RL: Hyperbaric lidocaine spinal anesthesia: Do we need an alternative? *Anesth Analg* 1995; 81:1125-8

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## Henry K. Beecher, M.D.: An Historical Perspective?

*To the Editor:*—I read with fascination the article by Gravenstein<sup>1</sup> about Henry K. Beecher. The author is to be commended for including so many interesting, personal antidotes about Dr. Beecher. This paper humanizes a historic person in a unique way, making Dr. Beecher's personality available to those who never had the chance to meet him.

However, the historic record does not support Dr. Gravenstein's thesis. Dr. Beecher did not, as Gravenstein wrote, make anesthesiology a university specialty. In fact, despite the author's comments to the contrary, Beecher's contributions to the academic practice of the specialty are modest when compared to his contemporaries. The man

who did more to make anesthesiology an equal in the university setting was Ralph Milton Waters of the University of Wisconsin. His teaching and departmental organization are used in more than 60% of the academic departments in the United States.<sup>2</sup> Richard Kitz, Beecher's successor, is from this lineage, and no doubt, even at the Massachusetts General Hospital (MGH), the influence of Ralph Waters prevails.

It is interesting to compare the appointments of the chief of anesthesia at the MGH in 1936 with the same position at Bellevue Hospital in New York City a year previously. Beecher, after completing 3 yr of training as a surgical house officer and a year working with August Krogh, the Danish

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Noble Laureate,<sup>3</sup> was appointed assistant anesthetist at MGH and instructor in anesthesia at Harvard. Five months later, with the departure of Howard H. Bradshaw, Beecher became anesthetist in chief at MGH, backed by the chairman of surgery, Edward D. Churchill.<sup>4</sup> By contrast, at Bellevue, the chairman of surgery, Arthur Wright, searched for the best-trained physician possible to head the anesthesia section. His choice was a junior faculty member of Ralph Waters' department in Madison, Wisconsin who had completed an internship, practiced as an internist for several years, and completed 3 yr of residency training in anesthesiology! Emery Andrew Rovenstine brought innovative anesthetic techniques and agents to Bellevue because he had been formally trained to do so; he also began to develop an extensive collaborative research relationship with the basic scientists at New York University. Within 2 yr of his arrival in New York, the Bellevue program rivaled any other program in the country. Over the next 20 yr, Rovenstine's program was the most successful and influential in the country, training more departmental chairs than any other university program.<sup>2</sup>

I must admit that I am somewhat perplexed by Dr. Gravenstein's statement that Beecher's relationship with organized anesthesia began with some difficulties.<sup>1</sup> Dr. Beecher was admitted to membership in the American Society of Anesthetists (ASA) on September 2, 1939.<sup>5</sup> However, Beecher would not have initially qualified for an advanced category of ASA membership called "fellow". This group was set up by the ASA as a method to designate specialists in the field of anesthesiology in 1936. There were specific criteria for membership in this elite group, including post graduate training and number of patients anesthetized. Originally, these criteria were set up to show to the American Medical Association that a specialty board in anesthesiology was viable. The fellowship was successful in two ways: first, because of the popularity of this designation, the ASA became a truly national organization, and second, it helped to convince the American Medical Association that a specialty board in anesthesiology was desirable. In fact, the American Board of Anesthesiology was incorporated in 1938, 2 yr after fellowship was first offered.<sup>6</sup> Beecher, however, would not have qualified in 1936 for fellowship because of his lack of experience and training at the time. The American Board of Anesthesiology granted Beecher diplomat status in 1939, and he was accepted into fellowship of the American College of Anesthesiology in 1942. (Beecher held certificate number 71 from the American Board of Anesthesiology. Fellowship certification of the ASA became the American College of Anesthesiology in 1941. Beecher held certificate number 211 from the college. Data are courtesy of Mr. Patrick Sim, Librarian, Wood Library-Museum of Anesthesiology, Park Ridge, Illinois.)

Beecher's curare study remains as controversial as when it was first published. Perhaps Gravenstein is correct in asserting that this was "a landmark epidemiologic investigation in anesthesia."<sup>1</sup> Did Beecher deserve praise for this work, as Gravenstein states? Probably not, because the publication of this paper did more harm to anesthesiology during its formative years than any other work. There are several concerns with this study. First and foremost, the wrong conclusions were drawn from the data. Curare has no more inherent toxicity than any other muscle relaxant. The real issue was training of the personnel using the agent, and *proper* observation of the patient. These are issues concerning which Beecher, as the Dorr Professor and a leading anesthesia educator, should have been a leader. Instead, Beecher chose to denigrate his specialty. Gravenstein admits that Beecher's work caused American servicemen to die during the Korean conflict. How many civilians died because of this paper? If the wrong conclusions are drawn from the data, will a study be remembered for its excellent design?

Gravenstein asks an interesting question in his article: "Does Beecher merit consideration at the Sesquicentennial of Ether Day?"<sup>1</sup> He further discusses an article entitled "Anesthesia's Second Power, Probing the Mind" that the author states Beecher presented at the centennial of Ether Day. In the preserved copy of the program of the ether centennial, Beecher did not present this paper. This 3-day affair, from October 15-17, was jointly sponsored by the New England Society of Anesthetists and the ASA and featured many of Beecher's contemporaries. Ralph Waters, Wesley Bourne, Frank Lahey, Stuart Cullen, and John Lundy gave presentations that helped to commemorate the event. Beecher was only a discussant for three papers of the opening session. Perhaps the paper Gravenstein cites was presented at the MGH ceremony on October 16, 1946, although no record exists other than the paper itself. In the pantheon of anesthesiologists who participated in the centennial, Beecher appears to have been a genial host, allowing his guests to take center stage.

Gravenstein's question begs for an answer. If the celebration of the sesquicentennial of the first public demonstration of ether anesthesia should be a parochial event, limited to Boston, or perhaps the MGH, it is fitting that Beecher be honored. But if this event were meant as a reflection of the history of anesthesiology in America, many of Beecher's contemporaries did more to bring anesthesiology into the university setting and to apply the standards of the university to the specialty than did Beecher. Waters and Rovenstine in America, Wesley Bourne in Canada, and Sir Robert Macintosh in Great Britain, individually, did far more to make anesthesiology an equal in the university than did Beecher. It is within this context that Beecher's life's work should be analyzed, and it is with this perspective that an accurate history of anesthesiology can be written, one that tells the fascinating story of who we are.

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## References

1. Gravenstein JS: Henry K. Beecher: The introduction of anesthesia into the university. *ANESTHESIOLOGY* 1998; 88:245-53
2. Bacon DR, Ament R: Ralph Waters and the beginnings of academic anesthesiology in the United States: the Wisconsin template. *J Clin Anesth* 1995; 7:528-34
3. Bunker JP: *The Anesthesiologist and the Surgeon*. Boston, Little, Brown and Company, 1972, pp 15-7
4. Beecher HK, Altschule MD: *Medicine at Harvard*. Hanover, The University Press of New England, 1977, pp 413-4
5. Membership data from the American Society of Anesthesiologists, Park Ridge
6. Bacon DR, Lema MJ: To define a specialty: A brief history of the American Board of Anesthesiology's first written examination. *J Clin Anesth* 1992; 4:489-97

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