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In Reply:—We hope we can clarify the misunderstandings expressed by Kao *et al.* The null hypothesis in our study¹ was that there is no segmental sensory change (as determined by standard clinical testing to pin-prick stimulus and cold) with epidural fentanyl. We initially used saline as a control but found that not only the fentanyl, but also the saline, produced segmental sensory changes.

We used the broad term "sensory change" to describe patient response to clinical testing. Despite the lack of clear scientific definition, the terms hypesthesia, hypalgesia, hyposensitivity, and sensory change are frequently used throughout the literature describing effects of spinal opioids.²⁻⁴ At no time did we attempt to identify any differences in the quality of the sensory changes detected. Indeed, we would be interested to know what methods Kao *et al.* suggest for distinguishing sensory changes. "Anesthesia" described as complete loss of sensation was neither expected nor found. The term "analgesia" also is not suitable in this context. The cold pressor response test⁵ and the psychogalvanic skin reflex⁶ are also inappropriate.

We appreciate the attempts of Kao *et al.* to postulate the mechanisms of action of the epidural saline. Alteration of transmembrane potentials as well as pressure effects may indeed play a part in the sensory changes. However, these in no way determine the extent of sensory change. Local anesthetic solutions also act by altering transmembrane potentials. We also point out that epidural fentanyl diluted in 10 ml saline produces the same pressure effects as saline alone.

We agree that the word "block" in figures 2 and 4 of our article is not strictly correct. "Level of sensory change" would be more accurate, but "block" is commonly used when testing for dermatomal levels after spinal and epidural anesthesia.

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Early Reports of Pulmonary Aspiration during General Anesthesia

To the Editor:—In his editorial "NPO after midnight for children—a reappraisal," Coté¹ refers to the first reported pediatric anesthetic death, in April 1848. This was the well-documented case of Hannah Greener.^{2,3} The frightened 15-yr-old girl died less than 2 min after starting to inhale chloroform, while sitting in the operating chair, when the incision was made for removal of a great toenail. There is no evidence that aspiration of gastric contents occurred. No vomiting was observed by her medical attendants and, because of the sitting position, silent regurgitation of gastric contents into the pharynx was physiologically impossible. Autopsy revealed that the stomach was distended

with food, but none was found in the bronchial tree, which contained bloody froth mixed with mucus. Simpson⁴ did not suggest that death was caused by aspiration of gastric contents; he claimed that it was the result of inhaling the brandy that was given for resuscitation, although the anesthesiologist stated that the brandy was administered *after* the girl had collapsed.

Snow's opinion,⁵ after reviewing the sequence of events, was: "From the lips becoming suddenly blanched, there is every reason to conclude that the heart was suddenly paralyzed." He documented 40 similar cases and concluded that the cause of death in every case was cardiac