In reply:—The letters of Engel and of Turnbull et al. nicely reiterate the conflicting biases of Keats and Hamilton as to causes of anesthetic mortality. Drawing from a much wider experience as a malpractice defense attorney, Engel's perceptions parallel my own. Turnbull et al. presumably find many more "possibly preventable" deaths than "fortuitous" or "unassessable" deaths, thus supporting Hamilton's view. It is to be hoped that they will one day give us their numbers and the bases for their judgments.

I would be saddened if readers of these two essays reduced their essence to a drug-versus-user debate. The major thrust, occupying more than half of my paper, was the painful documentation of the error-bias that has pervaded out specialty since its inception and still pervades it. Error clearly plays a large but as yet undetermined role, and no whitewash was intended. But I did urge that we also look beyond error. Where? Look at the adverse drug reactions. Look for new mechanisms. Look into the obligatory death rate associated with hospitalization. Most importantly, I urged that we accept the existence of anesthetic deaths without human or machine error in patients not expected to die and our ignorance as to cause. This would be the first step toward investigation of such deaths. To do otherwise would be to conclude we already know all there is to know and to convert our error-bias to certain knowledge that every anesthetic injury and mortality was preventable. Even Dr. Hamilton did not go this far.

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Abduction of the Vocal Cords

To the Editor:—In considering congenital vocal cord paralysis, Dr. Maze and Mr. Bloch\(^1\) repeat the venerable assertion that abductor fibers of the recurrent laryngeal nerve are more easily damaged than adductor fibers. The basis for this time-honored opinion has been challenged by a recent study, which suggests that there is no truly abductor muscle for the human vocal folds.\(^2\) There is none for the vestibular folds either. Abduction of the vocal folds is effected indirectly by the unfolding attendant on inspiratory caudal descent of the larynx as a whole. The inspiratory muscles responsible for this descent supply a much more powerful opening element than the reputed abductors, the relatively tiny cricoarytenoids, whose role in man is to keep the arytenoid cartilages in balance for the operation of folding and unfolding.\(^3\)

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REFERENCES


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Rare Cause of Stridor

To the Editor:—The review by Maze and Block\(^1\) of stridor in pediatric patients brings to mind a recent case of a 3-year-old boy who was seen in the hospital emergency department because of stridor. A diagnosis of croup was made and the boy was sent home with instructions for conservative therapy. The stridor worsened, and he returned to the hospital later the same day. At this time a lateral roentgenogram of

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