REFERENCES


(Accepted for publication September 3, 1981)

Anesthesiology
64:300, 1986

Computerized Anesthesia Records May Be Dangerous

To the Editor.—Lees’ recent letter regarding computerized anesthesia records1 and the response by Rosen and Rosenzweig2 raise important issues in the discussion of communication between “smart” pieces of equipment. This interchange is of considerable value in the pursuit of integrating diverse pieces of equipment into a harmonious whole.

The expenditure of energy toward production of an automated anesthetic records needs to be considered separately from the mechanical aspects of accomplishing the task. There is little doubt that, given a clearly defined objective, equipment can be designed to produce anesthetic records. Meanwhile, no discussion has been devoted toward the question of whether this job ought to be done at all!

An anesthetic record serves more than one purpose. All of us are aware of its legal implications. An unreadable or incomplete record is looked at with considerable interest by plaintiff’s attorneys. A computer-generated record would appear to be a completely excellent defense, once the technical problems of communications protocols and artifact rejection are solved. Beyond this, one simply needs to clearly define the desired information and method of presentation before full-scale implementation of computerized records can become a commercial fact.

The pursuit of computer-generated records overlooks a second, more important, aspect of anesthetic recordkeeping. The anesthetic record is the physician’s best tool for conceptually organizing the course of an anesthetic. The act of recording information on the chart forces the anesthesiologist to be aware of the time course and detail of anesthetic events. This awareness is the most important factor in anticipating further events, and correcting untoward events. A mechanically created record, regardless of the facility with which added notations can be made, has the capacity to be formed without ever passing through the consciousness of the anesthesiologist.

This fact would not escape the notice of a competent plaintiff’s attorney. Until the machine can be endowed with the wisdom we are supposed to possess (at which point there will no longer be any need for us), any effort to have the machine be the full recordkeeper becomes a means of removing the physician from the closed-loop control of the anesthetic. This introduces a dangerous new source of inattention and error.

Efforts to improve machine communication with other machines are useful as long as they continue to integrate and improve information presentation to the anesthesiologist, the only monitor in the operating room. The efforts to create automated anesthetic records, while interesting technical exercises, are dangerous because they bypass the anesthesiologist, making it easier for essential information to go unrecognized. Until true machine intelligence is developed, anesthesia recordkeeping should remain a task performed by the human hand.

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(Accepted for publication September 10, 1985)