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*In reply:*—The criticisms by Dr. Lees of our computerized anesthesia record are based mainly on some commonly held misconceptions. We think that he would be convinced his search for the computerized anesthesia record has ended if we could dispel some of these misconceptions.

In regard to the RS-232 interface, standards have been established by the Electronics Industry Association (EIA) that go beyond just matching plugs but extend to communications protocols, which include signal voltages, frequencies, and data formats. A number of monitor manufacturers are making available interfaces in compliance with these standards. United Medical Technologies customizes the program to the protocol, data format, and information content offered by the manufacturer. As a result, and contrary to the implications of Dr. Lees' criticism, the operation of the RS-232 interface is completely transparent to the user.

As for the difficulty of manual data entry, this is a matter of individual ability. In any case, it comes down to exchanging keystrokes for pen strokes.

The plotting time for the entire record depicted in our article was 14 min, starting from a blank sheet of paper. With reduced information content, the plotting time is less. It may be tedious to watch the plotting process, but it does work unattended. United Medical Technologies now has a version of the program that runs on IBM® compatible computers. These can accommodate up to four RS-232 interfaces, which allow one interface to communicate with the monitor and another to communicate with the plotter so that plotting can be done during the case. Plotting time then becomes inconsequential.

The accuracy referred to in our letter indicates the preciseness with which the plotter can produce points on a calibrated grid. No claim was made or could reasonably be inferred that this could make up for

errors in transducer function or poor manual techniques of blood pressure acquisition. There still needs to be a doctor in the house.

Entries to be made in any order at any time naturally refers only to information that is known. Prior to the case this would include patient name and preop data, OR team, and anesthesia plan. This certainly could not include information only obtainable during the case, though this can be recorded after the fact if necessary. Condition of the patient in recovery and last details of the record are usually inserted after the case is over.

It is obvious that a good record cannot cover up a bad anesthetic. This was not stated nor implied. This does not, however, minimize the importance of a well-kept record.

The FDA has been contacted to determine whether this computer application requires premarket notification under regulation 510(k). No determination has yet been made.

A demonstration disc that runs on IBM®-compatible computers is available from United Medical Technologies for those interested in testing the system. We invite Dr. Lees to try it. He may like it.

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### Bilateral Amaurosis Following Unilateral Retrobulbar Block

*To the Editor:*—Numerous complications of retrobulbar block have been described, including brain stem anesthesia with unconsciousness and apnea,<sup>1,2</sup> grand mal seizures,<sup>3</sup> retrobulbar hemorrhage,<sup>4</sup> elicitation of the oculocardiac reflex,<sup>4</sup> toxic reaction from intravascular injection,<sup>4</sup> central retinal artery occlusion,<sup>4</sup> optic nerve neuropathy,<sup>4</sup> and perforation of the globe.<sup>5</sup> The follow-

ing is a case of transient bilateral blindness following unilateral retrobulbar block, which we have been unable to find previously reported in the literature.

The patient was a 67-year-old, 66-kg male who was having repair of a leaking corneal suture line of the left eye. The patient had undergone a left corneal transplant for an infected perforated corneal ulcer under uneventful