Blind, But Not Deaf or Dirty, Intubations

To the Editor:—"Blind" nasotracheal intubation remains an invaluable technique in the operating room and the intensive care unit. Many methods have been proposed to facilitate intubation in the spontaneously breathing patient.1-4 Among these are:

1. Listening for breath sounds at the end of the endotracheal tube (can be dirty from an infectious viewpoint);
2. Watching for misting during exhalation (not very localizing);
3. Attaching a breathing bag to the endotracheal tube to observe the respiratory cycle (difficult to do without proper equipment);
4. Attaching a whistle or microphone to the end of the endotracheal tube to magnify breath sounds (requires extra equipment); and
5. Close observation and palpation of the anterior neck as the endotracheal tube is advanced (not very localizing).

We utilize a technique for blind endotracheal intubation which, without special equipment, allows one at a distance from the patient's head to clearly hear breath sounds emitted from the endotracheal tube and to observe and palpate the neck.

The equipment required includes a binaural (or monaural) stethoscope and a sterile intravenous extension tubing (K-50, Pharmaseal Inc., or equivalent). One end of the extension tube is attached to the distal end of the stethoscope (replacing the diaphragm head) and the other connector is cut off. The cut end of the extension tube is positioned about half-way down the endotracheal tube, and the operator listens as the tube is advanced through the pharynx into the trachea during inspiration. Breath sounds are easily heard and subtle changes in quality and volume are easily discerned. Using this method, the operator can simultaneously advance the tube, listen for breath sounds, and observe the patient and physiologic monitors. It has the additional advantage of removing the operator from possibly infectious aerosols released by the patient's coughing, which may be hazardous with the ear-to-endotracheal tube method. We have used this method to facilitate "blind" nasal and "blind" oral intubation.

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REFERENCES


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Another Potential Source of a Major Gas Leak

To the Editor:—Our anesthetic machines are equipped with Fisher and Paykel Servo Controlled Heated Respiratory Humidifier® (Fisher and Paykel Ltd. Medical Products, New Zealand, Cat. No. MR500) for provision of humidity during endotracheal anesthesia. We use the "Single-use Low Flow Humidification Chamber" (Fisher & Paykel, Cat. No. MR330) in series on the inspiratory limb of the semiclosed circle system. During a recent case, we experienced a major gas leak from the humidification chamber. Subsequent investigation revealed a recent change in the design of the humidification chamber which, in our opinion, is a potential source of intraoperative gas leaks.

Figure 1 illustrates the old and the new models of the Single-use Low Flow Humidification Chamber. Both models have the same catalog number. The original version had only two ports on the top of the chamber (an inlet and an outlet port, respectively). The new version has an additional small port, which is normally occluded with a plastic stopper. The distributor informs us that this
orifice is intended as a waterfeed port. We found that the stopper can be easily dislodged and was the source of the major gas leak in the circuit in our case. We would like to point out that this is a potential source of a major gas leak intraoperatively. The problem has been brought to the attention of the distributors of the product (Isothermal System Inc., 3333 Durahart St., Riverside, California 92507), who were unaware of a change in the design.

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In reply:—The waterfeed inlet was first introduced 2 yr ago on our MR320 low compressible volume chambers and, because of its subsequent wide exposure and usage around the world, we are very confident of the designs involved.

In mid-1984, the waterfeed inlet was standardized on our adult range of chambers (that is, the MR310, MR330, and MR360 models). Just prior to this standardization, a preproduction run of MR330 without the waterfeed inlet was released on a limited basis. The differences highlighted in the correspondence are between the preproduction type and those from subsequent product. As our new distributor, Isothermal Systems, Inc., did not begin distribution until April 1985, they would not have been aware of these changes, nor would they have been involved in them.

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Furosemide May Be Detrimental in the Treatment of Pulmonary Edema

To the Editor:—As part of the treatment protocol of a patient who developed noncardiogenic pulmonary edema following a blood transfusion, Ebert et al.1 describe the use of large dose of furosemide to "decrease the gradient for the transudation of fluid toward the alveolus through reduction of the pulmonary hydrostatic pressure." This may not always be appropriate therapy, as was well-illustrated in their report.

The patient in question, after receiving 100 mg furosemide in the first hour following the onset of respiratory