

Better Designs for Mass Spectrometer Monitoring of the Awake Patient

To the Editor:—Recently, Ibarra and Lees¹ described an oxygen cannulae modified to accept the sampling line of the mass spectrometer for monitoring of end-tidal (ET) CO₂ in an awake patient. However, we have tried the described method and found it unsatisfactory. An alternative method has proved more reliable.

An appropriate-size nasal airway is inserted into a naris using lubricant containing local anesthetic. The thin plastic sampling line, from the mass spectrometer, is inserted into the nasal airway. The tip of the sampling tube is placed 1 cm from the pharyngeal opening of the airway. The tubing is then sutured to the nasal airway (fig. 1).

We conducted patient trials using each technique in awake and sedated patients in the operating room and recovery room. Whereas neither method is as reliable as monitoring ET CO₂ via an endotracheal tube, a satisfactory ET CO₂ curve was obtained more consistently using the nasal airway. With both techniques, the sampling tube occasionally becomes obstructed with secretions.

EDWARD A. NORMAN, M.D.
Fellow in Obstetrical Anesthesia

NORMAN J. ZEIG, M.D.
Chairman, Department of Anesthesia

IDREES AHMAD, M.D.
Anesthesiologist

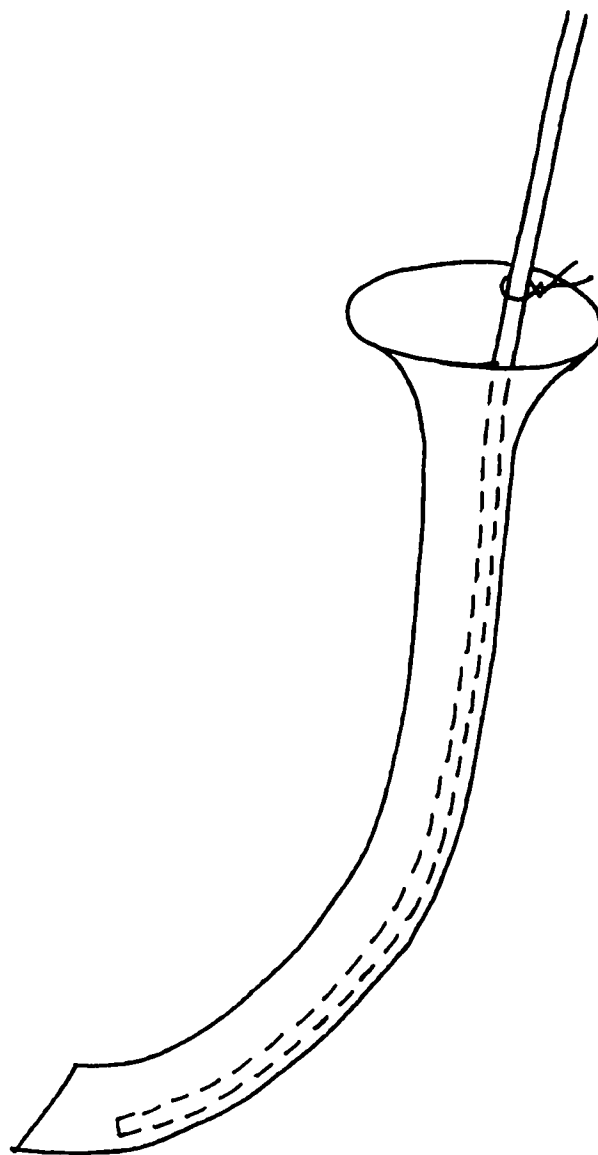
*Department of Anesthesia
St. Barnabas Medical Center
Livingston, New Jersey 07039*

REFERENCE

1. Ibarra E, Lees DE: Mass spectrometer monitoring of patients with regional anesthesia. *ANESTHESIOLOGY* 63:572-573, 1985

(Accepted for publication December 16, 1985.)

FIG. 1. Nasal airway with inserted sampling tube from the mass spectrometer.



Elective Coronary Bypass Surgery without Pulmonary Artery Catheter Monitoring

To the Editor:—Bashein *et al.* demonstrated in their retrospective study¹ that there was little difference in the mortality and perioperative rates between those patients in whom pulmonary artery pressure monitoring was used in addition to central venous pressure measurement.

In this unit, central venous pressure measurement alone

was used for 764 consecutive patients who underwent elective, isolated coronary artery bypass graft surgery during the last 3 yr (October 1982–October 1985). There were 669 men and 95 women. Patient age (mean \pm SD) was 56.0 ± 8.5 yr, with a range of 21–79 yr.

Left ventricular function as assessed by angiography