A Simple, Easy, and Inexpensive Method for Monitoring ETCO₂ through Nasal Cannulae

To the Editor:—The monitoring of end-tidal CO₂ (ETCO₂) can provide useful data about adequacy of ventilation in the sedated or narcotized patient. Depression of respiratory rate and CO₂ retention can be readily evaluated. Such a system can even serve as an apnea monitor.

The following setup, which allows measurement of ETCO₂ during delivery of oxygen via nasal cannulae, can be easily and rapidly assembled. A standard 16-gauge intravenous catheter is inserted perpendicularly through the plastic tubing and threaded into the lumen of one cannula. The metal stylet is removed and the CO₂ sampling tube attached to the iv catheter hub, as illustrated in figure 1. The waveform depicted in figure 1 was obtained during quiet breathing with a partially opened mouth and 3 l O₂ flow. The morphology of the alveolar plateau suggests that the sample obtained is indeed end-tidal.

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One-way Leak in Mass Spectrometer Sampling System

To the Editor:—Mass spectrometry has become an increasingly common monitoring device. As with any monitoring tool, however, effective utilization requires the practitioner to be able to identify artifactual or erroneous data. A recent letter published in this journal reported on an unusual end-tidal CO₂ waveform resulting from a loose luer-lock fitting in the sampling tubing.¹ We report here an apparent one-way leak in the sampling system caused by a small crack in the capillary tubing.

Our operating suite is equipped with a Perkin-Elmer 1150® Respiratory Monitoring System. A disposable sampling tubing with luer lock manufactured by the Dryden Corporation® (#12711) is currently in use. During the course of two otherwise uneventful general endotracheal anesthetics, the partial pressure of expired nitrogen suddenly increased, while no inspired nitrogen was detected, a situation compatible with significant air embolus (fig. 1). A leak in the circuit was considered, although the absence of inspired nitrogen
A Note of Caution when Using Different Cuffs with the Dinamap™

To the Editor,—In the May issue of Anesthesiology, Drs. Yamashita, Motokawa, and Tsuneto describe an adaptor for attaching a DURA-CUF™ blood pressure cuff to the DINAMAP™ Monitor Model 1846 8-foot hose designed specifically for use with a neonatal DISPOSA-CUF™. Although it appears to be a convenient alternative to switching hoses between patients of varying sizes, a number of issues surrounding the design and function of DINAMAP™ Monitors should be considered.

DINAMAP™ Monitor Models 1846, 1846SX, and 8100 employ a method known as “cuff typing” for determining whether the attached cuff is in the neonatal or adult/pediatric range. It is achieved through the pneumatic system of the DINAMAP™ Monitor, and the key determinant is the length of the hose attached to the device. Based on this information, the DINAMAP™ Monitor operates under one of two sets of standards; one for adult/pediatric patients, and the other for neonatal patients. The DINAMAP™ monitor will automatically switch into the proper mode when the correct length air hose is attached to it. An operator attempting to monitor an adult/pediatric patient whose blood pressure cuff is attached to a neonatal air hose...