

CORRESPONDENCE

Anesthesiology
81:520, 1994
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Reflections. . .

If sulfate, why not morphine?
If pneumonia, why not pneuborn?
As orthopaedics, so why not anaesthesia?
Or even anaemia.
But then psychiatry. . .
I'd best be psylent.

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(Accepted for publication April 22, 1994.)

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Volatile Agent Scavenging and Vaporizer Filling

To the Editor:—Vaporizer filling commonly is performed with the vaporizer attached to the anesthesia machine. This procedure is accompanied by a brief but high peak in the atmospheric concentration of volatile agent in the vicinity of the anesthesia machine even when keyed fill systems are used.^{1,2} We describe a convenient method for scavenging volatile agent during vaporizer filling.

Before filling, we suspend a face tent (Hospitak, Lindenhurst, NY), using its adjustable elasticated strap, under the vaporizer fill port (fig. 1). The face tent is attached to the anesthesia machine suction apparatus, which is itself connected to the hospital vacuum supply. The suction apparatus is turned on, generating a vacuum of 250 mmHg and an air flow of 40 l/min. Vaporizer filling then is conducted in the usual way. We have measured halothane vapor concentrations at a distance of 30 cm from the filling port of a nonkeyed Ohmeda Tec 3 vaporizer using a Miran 1A single beam infrared spectrometer (Foxboro, East Bridgewater, MA). The spectrometer sample tube was positioned directly in front of the vaporizer, level with the top of the vaporizer concentration dial. Without using the face tent scavenger, careful filling in accordance with the manufacturer's instructions* on five occasions, conducted over 30 s, ensuring no spillage of liquid agent onto the anesthesia machine work surface, resulted in peak halothane concentrations between 77 and 87 ppm. We then employed an identical filling technique, using the same agent volume (75 ml) and time interval in the presence of a face tent connected to the anesthesia machine suction tubing (fig. 2). Peak halothane concentrations of 3 ppm or less were observed in four cases. On a

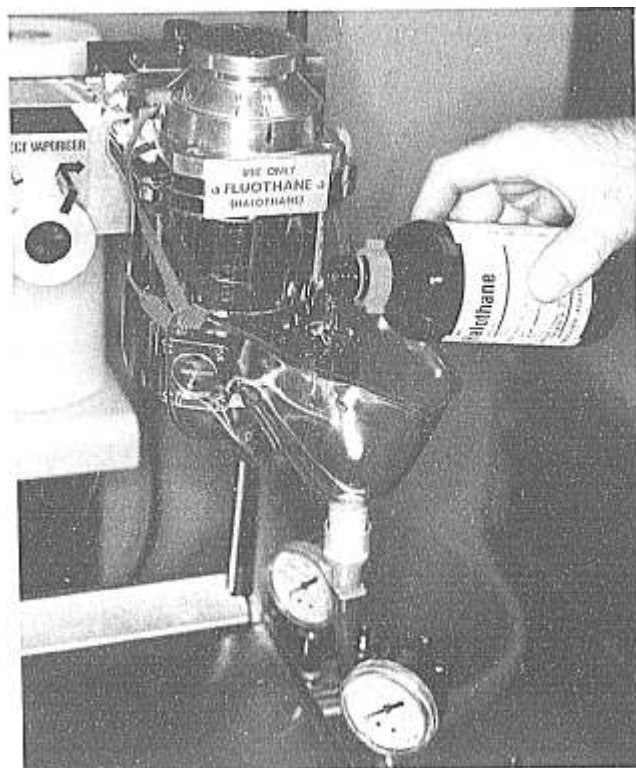


Fig. 1. Hospitak face tent suspended under fill port of a Tec 3 vaporizer during the filling procedure.

*Tec 3 Vaporizer: Operators manual. CY 523. Steeton, Ohmeda, BOC Health Care, 1986