

REFERENCES

1. Brajtbord D, Paulsen AW, Ramsay MAE, Swygert TH, Valek TR: Controversies associated with autotransfusion during hepatic transplantation (abstract). *ANESTHESIOLOGY* 69:A171, 1988
2. Black HA, Dearing JP: Exchange transfusion prior to cardiopul-

- monary bypass in sickle cell anemia. *J Extra-Corp Technol* 12: 82-85, 1980
3. Romanoff ME, Woodward DG, Bullard WG: Autologous blood transfusion in patients with sickle cell trait. *ANESTHESIOLOGY* 68:820-821, 1988

(Accepted for publication January 24, 1989.)

Anesthesiology
70:879, 1989

A Humidification Device for Nasal Oxygen

To the Editor:—Inhalation of dry oxygen causes uncomfortable symptoms such as nasal dryness, stuffiness, and itching, despite flows as low as 3 l/min. We have devised a simple, inexpensive means of humidification of oxygen for use with nasal cannulae. As shown in figure 1, the Y-piece of the breathing circuit is attached to an Airlife brand (American Pharmaseal Company) or similar humidifier bottle via a double male 22-mm corrugated tubing adaptor. Humidification is achieved by bubbling oxygen through water, the humidity being low enough to avoid condensation in the long narrow tubing that is connected to the nasal cannulae.

We have tested the device on 40 unselected women undergoing cesarean section under regional analgesia. Unannounced change from dry to humidified oxygen was always followed by statements that breathing was suddenly easier, while change from humidified to dry oxygen led to complaints of discomfort. Flow rates of up to 5 l/min were well tolerated. Pulse oximetry revealed no differences in oxygen saturation between inhalation of dry *versus* humidified oxygen.

We recommend use of this simple device for any situation requiring inhalation of nasal oxygen by conscious patients.

I. DAVID ELSTEIN, M.D.
Fellow in Obstetric Anesthesia

GERTIE F. MARX, M.D.
Professor of Anesthesiology

*Albert Einstein College of Medicine
Department of Anesthesiology—J 1226
1300 Morris Park Avenue
Bronx, New York 10461*

(Accepted for publication January 24, 1989.)

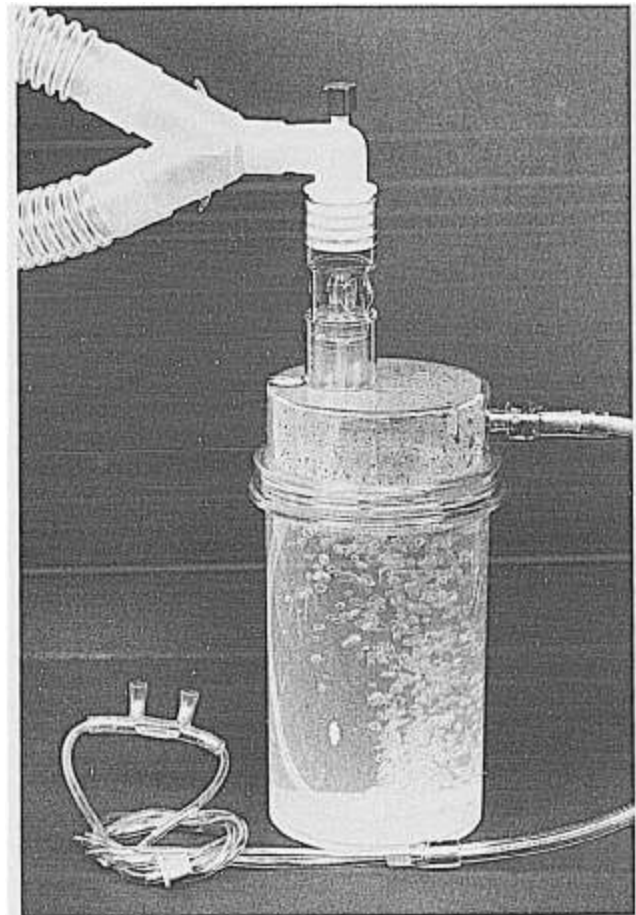


FIG. 1. Humidification device for nasal oxygen (from top to bottom): Y-piece of anesthesia breathing circuit; double male 22-mm adaptor; humidification bottle; and nasal cannula.

Anesthesiology
70:879-880, 1989

Postoperative Apnea in a Full-term Infant

To the Editor:—We read with interest the report of postanesthetic apnea in a healthy full-term infant.¹ We recently cared for a term

infant who experienced a similar single episode of apnea, accompanied by bradycardia, 6 h after a 2-h general anesthetic. We write to support