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An Alternative to Purging an Anesthetic Machine for Patients in Whom Malignant Hyperthermia is a Possibility

To the Editor:—We were recently asked to anesthetize a child with a history of hyperpyrexia after a previous anesthetic at a time when a "clean machine" was not available. Rather than cancel the case or purge a machine,[1] we combined a N^2O/O_2 blender (Low Flow Nitrous Oxide Blender No. 2903; Bird Products Corp., Palm Springs, CA) (previously described[2]) with a Bain circuit (Curity 2491) and anesthetized the patient using drugs that do not precipitate malignant hyperthermia. We have since used this system for a newborn with presumed myotonia congenita and several children with questionable histories of malignant hyperthermia susceptibility. The system is used with a FEO_2 monitor and a mass spectrometer, and has performed adequately in every instance.

The system connects to the OR high pressure gas tubing and is mounted on an iv poly (Fig. 1). Overflow from the system can be scavenged. It is very light and portable, and we have used it as a standby system when women with known familial malignant hyperthermia have been in labor.

We would recommend this system as a safe, economical alternative to a dedicated clean machine for patients felt to be malignant hyperthermia susceptible.

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REFERENCES

1. Beebe J, Sessler MD: Preparation of anesthesia machines for patients susceptible to malignant hyperthermia. ANESTHESIOLOGY 69:395–400, 1988
2. Brown DL, Schulz J: Modification of a critical care ventilator for anesthesia use. Crit Care Med 15:1055–1057, 1987

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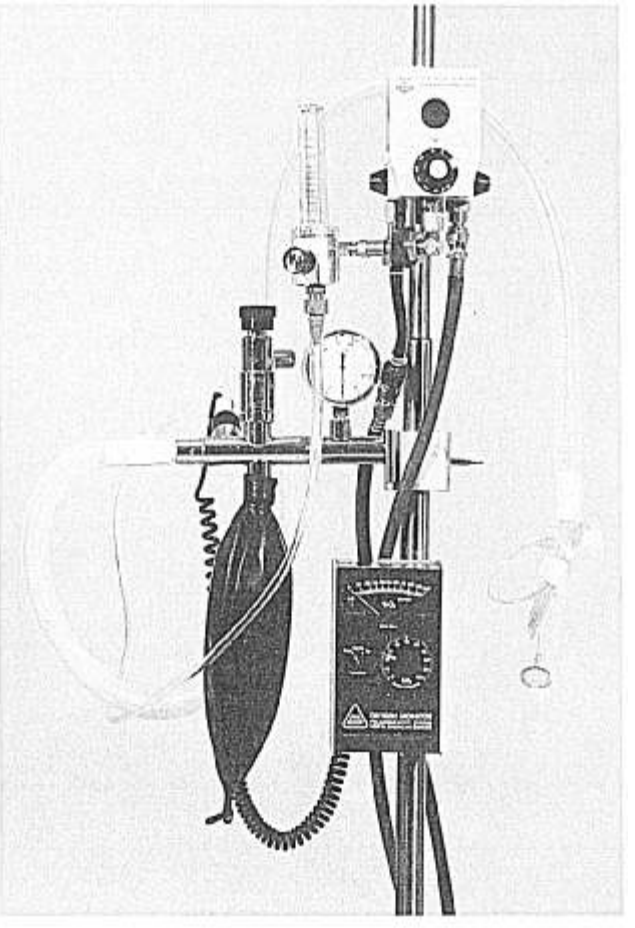

FIG. 1. High pressure oxygen and nitrous oxide tubing attached to nitrous oxide blender, the output of which is directed through a flow meter into a disposable Bain circuit. Note presence of an oxygen analyzer.

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Convulsions and Temporary Hemiparesis following Spinal Anesthesia in a Child with Moyamoya Disease

To the Editor:—Lund[1] has emphasized the importance of pre-existing undiagnosed neurologic disease as a precipitating factor of major neurologic complications following spinal anesthesia. We report a case of a child in whom moyamoya disease was diagnosed after neurologic sequelae followed spinal anesthesia.

A 5-yr-old, 22-kg, healthy boy was scheduled for surgery to correct phimosis. Past medical history was negative except for mumps 10 days earlier. Following premedication, a 24-gauge spinal needle was introduced at the L_{3-4} interspace and 1.1 ml of 0.5% hyperbaric tetracaine with phenylephrine was injected. A T_{10} sensory level to pin prick was