

The authors are indebted to Miss Dianne M. K. Impelman, Mrs. Anne White, and Mr. Richard Shargel for their assistance. Halothane (Fluothane) for this study was donated by Ayerst Laboratories, and Forane (compound 469) was provided by Ohio Medical Products.

References

1. Severinghaus JW, Larson CP Jr: Respiration in anesthesia, *Handbook of Physiology*. Volume II, Respiration. Baltimore, Williams and Wilkins, 1965, pp. 1219
2. Larson CP, Jr, Eger EI II, Muallem M, *et al.*: The effects of diethyl ether and methoxyflurane on ventilation. *ANESTHESIOLOGY* 30: 174-184, 1969
3. Muallem M, Larson CP Jr, Eger EI II: The effects of diethyl ether on P_{aCO_2} in dogs with and without vagal, somatic and sympathetic block. *ANESTHESIOLOGY* 30:185-191, 1969
4. Hanks EC, Ngai SH, Fink BR: Respiratory threshold for carbon dioxide in anesthetized man. *ANESTHESIOLOGY* 22:393-397, 1961
5. Fink RB, Ngai SH, Hanks EC: The central regulation of respiration during halothane anesthesia. *ANESTHESIOLOGY* 23:200-206, 1962
6. Severinghaus JW: Continuously recording ventilometer. *ANESTHESIOLOGY* 23:582-583, 1962
7. Munson ES, Saidman LJ, Eger EI II: Solubility of fluorene in blood and tissue homogenates. *ANESTHESIOLOGY* 25:638-640, 1964
8. Fourcade HE, Stevens WC, Larson CP Jr, *et al.*: The ventilatory effects of Forane, a new inhaled anesthetic. *ANESTHESIOLOGY* 35:26-31, 1971
9. Munson ES, Larson CP Jr, Babad AA, *et al.*: The effects of halothane, fluorene and cyclopropane on ventilation: A comparative study in man. *ANESTHESIOLOGY* 27:716-728, 1966
10. Bainton CR, Mitchell RA: Posthyperventilation apnea in awake man. *J Appl Physiol* 21:411-415, 1966
11. Mitchell RA, Bainton CR, Edelist G: Posthyperventilation apnea in awake dogs during metabolic acidosis and hypoxia. *J Appl Physiol* 21:1363-1367, 1966

Drugs

METHOXYFLURANE AND RENAL FAILURE Methoxyflurane has been implicated in postoperative polyuric renal failure. Seven patients subjected to radical surgical operations under methoxyflurane anesthesia developed renal failure. A striking degree of renal tubular oxalate precipitation was found by renal biopsy in all seven patients, and methoxyflurane was implicated as a cause of secondary hyperoxaluria and intrarenal oxalate precipitation when renal function was compromised during or immediately following operation. Strict attention to postoperative fluid balances in all patients receiving methoxyflurane is important to prevent or minimize oxalate precipitation in the kidneys. (*Fraschino, J. A., et al.: Renal Oxalosis and Azotemia after Methoxyflurane Anesthesia, New Engl. J. Med.* 283: 676 (Sept.) 1970.) EDITOR'S COMMENT: What about the indications for use of methoxyflurane?

BETA-ADRENERGIC BLOCKADE AND ATRIAL ARRHYTHMIAS Alprenolol (Aptine), a new beta-adrenergic blocking agent, was administered intravenously on 25 occasions to 23 patients with atrial arrhythmias. Significant slowing of ventricular rates was achieved in 20 patients by decreasing atrioventricular conduction in those with atrial fibrillation and flutter and by slowing the rate of ectopic impulse formation in those with paroxysmal supraventricular tachycardia. In four patients the latter arrhythmia reverted to sinus rhythm following administration of alprenolol. In four patients with atrial fibrillation the chronotropic effect of isoproterenol was substantially abolished after treatment with alprenolol. Alprenolol appears to be a safe, effective beta-adrenergic blocking agent in the treatment of atrial arrhythmias. (*Kerber, R. E., et al.: Treatment of Atrial Arrhythmias with Alprenolol, J.A.M.A.* 214: 1849 (Dec.) 1970.)