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coronary sinus. In the case of cyclopropane there was no evidence of any interference with the tissue uptake of infused norepinephrine. We conclude that cyclopropane and halothane, unlike cocaine, can enhance the chronotropic response to accelerator nerve stimulation without modifying the mechanism of norepinephrine release and re-storage. We found no evidence that cyclopropane interferes with the metabolism of norepinephrine.

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References

- Price, H. L., and Price, M. L.: Relative ganglion-blocking potencies of cyclopropane, halothane and nitrous oxide, and the interaction of nitrous oxide with halothane, ANES-THESIOLOCY 28: 349, 1967.
- Koelle, G. B., Neurohumoral transmission and the autonomic nervous system. In The Pharmacological Basis of Therapeutics. Goodman, L. S., and Gilman, A., Editors. New York, MacMillan Co., 1965, p. 433.
- Brewster, W. R., Isaacs, J. P., Osgood, P. F., and King, T. L.: The hemodynamic and metabolic inter-relationships in the activity of epinephrine, norepinephrine and the thyroid hormones, Circulation 13: 1, 1956.
- Mizeres, N. J.: The origin and course of the cardioaccelerator fibers in the dog, Anat. Rec. 132: 261, 1958.
- 5. Price, H. L., and Price, M. L.: The chemical estimation of epinephrine and norepinephrine in humans and canine plasma. II. A

critique of the trihydroxyindole methods, J. Lab. Clin. Med. 50: 769, 1957.

- Linde, H. W., and Price, H. L.: Gas analyzer for rapid estimation of cyclopropane, ANES-THESIOLOGY 19: 757, 1958.
- Crout, J. R.: Effect of inhibiting both catecholo-methyl transferase and monoamine oxidase on cardiovascular responses to norepinephrine, Proc. Soc. Exp. Biol. Med. 108: 482, 1961.
- Muscholl, E.: Pharmacology of cholinergic and adrenergic transmission. Koelle, G. B., Douglas, W. W., and Carlson, A., Editors. New York, MacMillan Company, 1965, p. 291.
- Price, H. L., Linde, H. W., Jones, R. E., Black, G. W., and Price, M. L.: Sympathoadrenal responses to general anesthesia in man and their relation to hemodynamics, <u>ANESTRESIOLOCY</u> 20: 563, 1959.
- Barcroft, H., and Starr, L: Comparison of the actions of adrenaline and noradrenaline on the cardiac output in man, Clin. Sci. 10: 295, 1951.
- Gardier, R. W., Endahl, G. L., and Hamelberg, W.: Cyclopropane effect on catecholamine bioitransformation, ANESTHESIOLOGY 28: 677, 1967.
- Deutsch, S., Linde, H. W., and Price, H. L.: Circulatory and sympatho-adrenal responses to cyclopropane in the dog, J. of Pharmacol. Exper. Ther. 135: 354, 1962.
- Millar, R. A., and Biscoe, T. J.: Post-ganglionic sympathetic discharge and the effect of inhalation anaesthetics, Brit. J. Anaesth. 38: 92, 1966.
- Millar, R. A., and Morris, M. E.: Induced sympathetic stimulation during halothane anaesthesia, Canad. Anaesth. Soc. J. 7: 423, 1960.

Anesthesia

UMBILICAL-CORD VENOUS PRESSURE Oxytocies have been used during the latter part of the second stage of labor to reduce postpartum blood loss. In a series of normal deliveries, venous pressure in the umbilical cord immediately after delivery was measured. Some of the mothers had received 0.2 mg. methylergonovine intravenously when the fetal head crowned. The mean cord venous pressure in the control group was 269.7 mm. of blood, but when the oxytocic had been used, the mean pressure was significantly higher, 429.6 mm. of blood. Multiparity and anesthesia did not seem to alter the cord venous pressure. Although all infants were normal on follow-up study, it is suggested that the abrupt and marked increase in cord venous pressure produced by intrapartum oxytocic drugs might be injurious to an infant with a cardiovascular abnormality. (LeDonnen, A. T., and McGouan, L.: Effect of an Ocytocic on Umbilical Cord Venous Pressure, Obstet. Gynec. 30: 103 (July) 1967.)