relative influence of mean intrathoracic pressure and arterial carbon dioxide tension, Brit. J. Anaesth., 39: 533, 1967.
6. Jones, R. E., Auldmann, N., Linde, H. W., Dripps, R. D., and Price, H. L.: Cyclopropane anesthesia. III. Effects of cyclopropane on respiration and circulation in normal man, ANESTHESIOLOGY 21: 380, 1960.
7. Caffrey, J. A., Eckstein, J. W., Hamilton, W. K., and Abboud, F. M.: Forearm venous and arterial response to halothane and cyclopropane, ANESTHESIOLOGY 26: 786, 1965.
8. Thomson, W. J.: Effect of induction of anesthesia in peripheral hemodynamics, Brit. J. Anaesth. 39: 211, 1967.
9. Hamilton, W. K., Larson, C. P., Bristow, J. D., and Rappoport, E.: Effect of cyclopropane and halothane on ventricular mechanics—a change in ventricular diastolic pressure volume relationships, J. Pharmacol. Exp. Ther. 154: 566, 1966.
10. Price, H. L., Linde, H. W., Jones, R. E., Black, G. W., and Price, M. L.: Sympatho adrenal responses to cyclopropane in man and their relation to hemodynamics, ANESTHESIOLOGY 20: 563, 1959.
11. Jones, R. E., Deutsch, S., and Tuinda, F. H.: Effect of atropine on cardiac rhythm in conscious and anesthetized man, ANESTHESIOLOGY 22: 67, 1961.
12. Price, H. L., Cook, W. A., Jr., Deutsch, S., Linde, H. W., Mishalove, R. D., and Morse, H. T.: Hemodynamic and central nervous system actions of cyclopropane in the dog, ANESTHESIOLOGY 24: 1, 1963.
13. Ngai, S. H., and Bolme, P.: Effects of anesthetics on circulatory regulatory mechanisms in the dog, J. Pharmacol. Exp. Ther. 153: 495, 1966.
14. McArdle, L., and Black, G.: Effects of cyclopropane on the peripheral circulation in man, Brit. J. Anaesth. 35: 352, 1963.
15. Price, H. L., and Price, M. L.: Effects of general anesthesia on contractile responses of rabbit aortic strips, ANESTHESIOLOGY 23: 16, 1962.
16. Fox, R. H., and Edholm, O. G.: Nervous control of cutaneous circulation, Brit. Med. Bull., 19: 110, 1963.
17. Handbook of Physiology. Sec. II, Vol. II, p. 1325. Washington, D. C., American Physiology Society, 1963.
18. Price, H. L., Warden, J. C., Cooperman, L. H., and Millar, R.: Central sympathetic excitation caused by cyclopropane, ANESTHESIOLOGY 30: 426, 1969.
19. McGregor, M., Davenport, H. T., Jegier, W., Sikelj, P., Gibbons, J. E., and Demers, P. P.: The cardiovascular effects of halothane in normal children, Brit. J. Anaesth. 30: 398, 1958.
20. Deutsch, S., Linde, H. W., Dripps, R. D., and Price, H. L.: Circulatory and respiratory actions of halothane in normal man, ANESTHESIOLOGY 23: 631, 1962.
21. Eger, E. I., II, Smith, N. T., Stoelting, R. K., and Whitcher, C.: The cardiovascular effects of various alveolar halothane concentrations in man, ANESTHESIOLOGY 29: 185, 1968.

Kidney

DRUG NEPHROPATHY Salicylate and phenacetin were administered to 19 hydropenic dogs and the renal accumulation and distribution of the major metabolic products, salicylate and N-acetyl-p-aminophenol (APAP) were studied. During peak blood levels of salicylate and/or APAP, the kidneys were rapidly removed, frozen, sliced from the cortex to the papillary tip, and analyzed for water, urea, APAP and salicylate. No renal medullary gradient for salicylate was found during either dry or hydrated states. In contrast, both free and conjugated APAP concentrations increased sharply in the inner medulla during hydropenia, reaching at the papillary tip a maximal value exceeding ten times the cortical concentration, a distribution similar to that of urea. Salicylate had no effect on the APAP gradient, but hydration markedly reduced both the APAP and urea gradients in the medulla. The data indicate that APAP probably shares the same renal mechanisms of transport and accumulation as acetamide and urea, and that papillary necrosis from excessive phenacetin may be related to high papillary concentration of APAP. (*Bluemle, L. W., Jr., and Goldberg, M.: Renal Accumulation of Salicylate and Phenacetin: Possible Mechanisms in the Nephropathy of Analgesic Abuse, J. Clin. Invest. 47: 2507 (Nov.) 1968.*)