step it is the mechanism most likely to be affected.

While it is not possible to decide from these results whether diethyl ether increases mono-amine oxidase activity, anesthetics (including cyclopropane and halothane in the concentrations used) apparently do not inhibit this enzyme. This is of some significance, at least, in considerations of anesthetic action on the metabolism of biogenic amines, especially that of catecholamines.

The skillful assistance of Miss Sonja Löfstrandh is gratefully acknowledged.

References

- Brodie, B. B., and Shore, P. A.: A concept for a role of serotonin and norepinephrine as chemical mediators in the brain, Ann. N. Y. Acad. Sci. 66: 631, 1957.
- Feldberg, W., and Myers, R. D.: Changes in temperature produced by microinjections of amines into the anterior hypothalamus of cats, J. Physiol. (London) 177: 239, 1965.
- Feldberg, W., Hellon, R. F., and Myers, R. D.: Effects on temperature of monoamines injected into the cerebral ventricles of anesthetized dogs, J. Physiol. (London) 186: 416, 1966.
- Anderson, E. G., and Bonnycastle, D. D.: A study of the central depressant action of pentobarbital, phenobarbital and diethyl ether in relationship to increases in brain 5-hydroxytryptamine, J. Pharmacol. Exp. Ther. 130: 138, 1960.
- 5. Bonnycastle, D. D., Bonnycastle, M. F., and Anderson, E. G.: The effect of a number of

- central depressant drugs upon brain 5-hydroxytryptamine levels in the rat, J. Pharmacol. Exp. Ther. 135: 17, 1962.
- Paasonen, M. K., and Giarman, N. J.: Brain levels of 5-hydroxytryptamine after various agents, Arch. Int. Pharmacodyn. 114: 189, 1958.
- Diaz, P. M., Ngai, S. H., and Costa, E.: The effect of oxygen on the brain serotonin metabolism in rats, Amer. J. Physiol. 214: 591, 1968.
- Bogdanski, D. F., Pletscher, A., Brodie, B. B., and Udenfriend, S.: Identification and assay of serotonin in brain, J. Pharmacol. Exp. Ther. 117: 82, 1956.
- Udenfriend, S., Weissbach, H., and Brodie, B. B.: Assay of serotonin and related metabolites, enzymes and drugs. In Click, D., ed.: Methods of Biochemical Analysis, Vol. VI. New York, Interscience Publishers, Inc., 1958, pp. 93-130.
- Neff, N. H., Tozer, T. N., and Brodie, B. B.: Application of steady-state kinetics to studies of the transfer of 5-hydroxyindoleacetic acid from brain to plasma, J. Pharmacol. Exp. Ther. 158: 214, 1967.
- Udenfriend, S.: Metabolism of 5-hydroxytryptamine. In Lewis, G. P., ed.: 5-Hydroxytryptamine. New York, Pergamon Press, 1958, pp. 43-49.
- Neff, N. H., and Tozer, T. N.: In cico measurement of brain serotonin turnover. In Garattini, S., and Shore, P., eds: Advances in Pharmacology, Vol. 6A. New York, Academic Press, 1968, pp. 97-109.
- Lovenberg, W., Jaquier, E., and Sjoerdsma, A.: Tryptophan hydroxylation: Measurement in pineal gland, brain stem and carcinoid tumor, Science 155: 217, 1967.

Kidney

RENAL FUNCTION Eighteen patients with normal renal function were investigated to determine the changes in urinary protein excretion associated with routine abdominal procedures. There was a real increase in urinary protein concentration and excretion at the time of and following surgery. This increase was transient, reaching a peak in the third or fourth postoperative 24-hour urine collection and returning to normal between the eighth and tenth postoperative days. Protein excretion was higher in patients who underwent major operations, which suggests that tubular handling of proteins was temporarily compromised. Whether there is actual cellular damage, or a metabolic change, is a matter of conjecture. (Macbeth, W. A., and Pope, G. R.: Effect of Abdominal Operation upon Protein Excretion in Man, Lancet 1: 215 (Feb.) 1968.)