

the peptide mixture. In human experiments, the peptide mixture and ACTH protein were indistinguishable in their action after equally large doses of either were administered (L. W. Kinsell *et al.*). An accurate quantitative comparison of the two in the clinic has not been made.

Physiological and pharmacological aspects of pituitary-adrenal interrelationships are discussed by B. L. Baker, F. C. Bartter with Fuller Albright and others, R. O. Greep, D. J. Ingle, C. N. H. Long, and E. H. Venning. Usually, but not always, the experimental basis for new hypotheses rather than those generally accepted is described. H. W. Deane reviews the experimental evidence for the independence of the zona glomerulosa of the rat's adrenal from anterior pituitary control.

J. W. Conn and his colleagues describe human experiments on which they base their belief that esterified cholesterol, according to its behavior in serum, is a probable precursor of cortical steroids. H. L. Mason discusses the methods he used in isolating 17-hydroxycorticosterone (Compound F) from the urine of patients who had been subjected to stress in major surgical operations or had received ACTH. Patterns of excretion of known and incompletely identified steroids of adrenal cortical origin are authoritatively described by Konrad Dobriner and his associates.

The adrenal cortical neoplasms which occur in gonadectomized mice of certain strains have been investigated for years by G. W. Woolley. Their frequency is higher in spayed females than in castrated males. Woolley is not able to report much progress in deciding whether anterior pituitary secretion is the "inciter." Pearson and his colleagues report their investigation of the effects of cortical secretions on neoplastic lymphoid tissue in one patient; however, their report appears to have little value until more observations have been made.

Some metabolic consequences of adrenal cortical secretion are considered by Engel, Gaunt, and Sprague. Engel is interested in the course of protein catabolism. Gaunt and his colleagues cautiously discuss hypotheses concerning water metabolism in relation to adrenal cortical function. Sprague and Power compare the metabolic effects of ACTH, cortisone, and Compound F in man. It is of interest that the last-named substance, believed by some to be the important steroid secreted by the adrenal cortex, had only slight metabolic effects after 900 mg had been administered to a patient over a period of 12 days.

Five communications are concerned with the effects of cortical secretions in experimental or clinical disease. The reaction of the organism to stress and its possible importance in the pathogenesis of several degenerative diseases are discussed by F. R. Skelton, an associate of Hans Selye. T. F. Dougherty describes interesting observations concerning the modification of hypersensitivity by adrenal cortical secretions. Several possible mechanisms are considered in explaining why "anaphylactogenic" substances cause less cellular damage if adequate adrenal cortical secretion

is available. A. C. Coreoran, as he admits, is not able to marshal convincing evidence that the adrenal cortex is "genetically concerned" in essential hypertension in man. Some aspects of human diabetes mellitus in relation to adrenal cortical secretions are discussed by E. S. Gordon. His preliminary studies make clear the great difficulty of securing satisfying results in this difficult field of clinical investigation. In the last report, Hudson Hoagland summarizes work of himself, Gregory Pincus, and their collaborators. Hoagland concludes that in about two thirds of a group of chronic (average hospitalization: 2.5 years) schizophrenic patients, the response of the adrenal cortex to ACTH, either secreted or injected, was abnormally low. It is suggested that this finding may have prognostic value in electroshock therapy, which produced greater benefit in patients with a more normal response to ACTH.

Gordon K. Moe, responsible for the organization of this symposium, succeeded in bringing together a large proportion of the American investigators interested in pituitary-adrenal physiology. Most of these brief reports are clearly written, and the collection will be welcome as a record of viewpoints and investigative interests in 1950.

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Scientific Book Register

- Parasitic Infections in Man.* Symposium held at the New York Academy of Medicine, March 15 and 16, 1949. Harry Most, Ed. New York: Columbia Univ. Press, 1951. 229 pp. \$4.50.
- Geography of the Pacific.* Otis W. Freeman, Ed. New York: Wiley; London: Chapman & Hall, 1951. 573 pp. \$10.00.
- Ecology of Animal Parasites.* Jean G. Baer. Urbana, Ill.: Univ. Illinois Press, 1951. 224 pp. \$5.00.
- Stereochemistry: A Textbook of General Organic Chemistry.* E. de Barry Barnett. New York: Pitman; London: Isaac Pitman & Sons, 1950. 169 pp. \$4.50.
- Industrial Solvents.* 2nd ed. Ibert Mellan. New York: Reinhold, 1950. 758 pp. \$12.00.
- Elements of Modern Physics.* Walter C. Michels and A. L. Patterson. New York: Van Nostrand, 1951. 659 pp. \$6.50.
- Formulario di Aerosolterapia.* Sergio Rocchietta. Turin, Italy: Minerva Medica, 1950. 156 pp. Lire 800.
- Paul Ehrlich.* Martha Marquardt. New York: Schuman, 1951. 255 pp. \$3.50.
- Surgical Forum.* Proceedings of the Forum Sessions, Thirty-sixth Clinical Congress of the American College of Surgeons, Boston, Massachusetts, October, 1950. Owen H. Wangenstein, Chairman. Philadelphia-London: Saunders, 1951. 665 pp. \$10.00.
- The Topology of Fibre Bundles.* Norman Steenrod. Princeton, N. J.: Princeton Univ. Press, 1951. 224 pp. \$5.00.
- Bases of Human Behavior: A Biologic Approach to Psychiatry.* Leon J. Saul. Philadelphia-London: Lippincott, 1951. 150 pp. \$4.00.