EVENTS

At its meeting on January 9, 1929, the Yale Medical Society was addressed by Dr. Heinrich Poll, Director of the Anatomical Institute of Hamburg University. His discussion of "Adrenaline, Insulin, and the Sex-hormone; Their Interrelations" based on work done in his own laboratory, was from the broad viewpoint of general biology, rather than from the narrower aspect of endocrinology proper.

The relation of insulin to adrenalin was illustrated by microscopic sections of the adrenal medulla and cortex, derived from both normal rats and those treated with insulin. The relative amount of the adrenalin deposit in each case was measured by counting the chromaffin cells. The effect of insulin was to decrease the adrenal deposits. This was interpreted as due, not to an actual decrease in the rate of secretion, but to a pouring out of the adrenalin into the blood stream.

A positive correlation could be shown between the internal secretion of the corpus luteum tissue of the ovary and the amount of the adrenalin in the so-called ganglion cervicis uteri. During pregnancy, the amount of adrenalin in this ganglion steadily increased, reaching a maximum just before parturition. Teleologically, one can perhaps assume that it is the function of this adrenalin deposit to make possible the vigorous contraction of the uterus necessary for parturition. Castration greatly reduced the amounts of adrenalin formed, but the subsequent injection of ovary extract increased the number of chromaffin cells. Similar effects were produced by turnip or potato juice.

In addition to these relationships, there is an interrelation between the sex-hormone and the secretion of the islands of Langerhans, since an increase in sex-hormone secretion also increased the secretion of insulin.

Thus the three principles are so related that an increase or decrease in any one secretion will destroy the existing equilibrium and set up a new one on a higher or lower plane of activity. Probably other endocrine glands of the body are involved and concerning these further studies are now in progress. The futility of dividing an
organism into sections for purposes of study was emphasized. The only true approach is from the concept of an organic whole.

R. W. H.

At the meeting of the Yale Medical Society held January 16, 1929, in the Sterling Hall of Medicine, Dr. H. M. Marvin discussed the subject of “The Electrocardiogram and Its Relation to Clinical Medicine.”

The fundamental principle involved in the electrocardiographic method, namely, that muscular contraction is due to, or is closely associated with, the passage through the active muscle of an impulse that is electrical in nature, is not a recent concept. Demonstrations of the truth of such a concept were actually made in 1858, and have been repeatedly confirmed in more recent decades. Some of the steps in the steady advance of the method, chiefly the contributions of Burdon-Sanderson and Waller, and the string galvanometer of Einthoven, were briefly described. There followed a description of the electrocardiograph and of the method by which records are obtained from patients. The essential portions of the special anatomy of the human heart, chiefly the general nature of the conduction system, were described and illustrated by sketches. Electrocardiograms were shown, illustrating all of the common arrhythmias and some of the special conditions, such as coronary thrombosis, in which the electrocardiogram has been found of distinct service in diagnosis. The value of the electrocardiogram in diagnosis or prognosis was briefly pointed out in connection with each curve as it was shown.

H. M. M.

A lecture on “Reading Disabilities and Difficulties in Children” was delivered before a psychiatry seminar group, at the Sterling Hall of Medicine, on January 18, 1928, by Dr. Samuel T. Orton, of New York City, formerly Director of Iowa State Psychopathic Hospital.

Of the entire school-population in this country from 2 to 6 per cent show a reading disability. These children cannot spell, read, or write; they cannot organize letters into words by the visual route, although otherwise, they may be perfectly efficient in their mental faculties. Since most psychological examinations entail reading, these children obviously are accredited with a wrong intelligence
quotient, for on special examination, a child who may have been
given an I.Q. of 0.71 in standard tests, will attain one of 1.20 in
tests that exclude this visual word-formation difficulty.

The most characteristic expression of the difficulty is found in
a sinistrad tendency—a reversal of letters, such as “b” for “d” or
“p” for “q”; a reversal of spelling, such as “nip” for “pin”; a re-
versal of syllables, like “astrep” for “repast”, and, most picturesque
of all, a complete reversal of writing, i.e., mirror-writing. Similarly
this sinistrad tendency may express itself in reading words, syllables,
or lines from right to left.

The lesion is presumed to be at the third level of cerebral elab-
oration, the highest level. The analog of the cerebral area of word-
formation in the visual cortex is suggested by the localization of the
epicritic sense of fine distinction and localization at the uppermost
or third level of the cerebral cortex. It is at this level that unilat-
eral dominance occurs. An instance of this is right-handedness.
If the two hemispheres, which are antitropic, should gain equal con-
trol of the highest function, rather than unilateral dominance, it is
conceivable that fluctuations would occur from side to side, and that
the final external manifestation could be one of reversals, as in the
sinistrad tendency.

D. K.

Dr. Edgar Mayer of Saranac Lake addressed the Surgical
Clinic on December 19 upon the subject of “Light Therapy in
Tuberculosis.”

The application of light therapy to the treatment of tuberculosis
has not yet reached the stage of standardized procedure. Different
workers utilize different sources of light and thus far adequate data
have not been gathered to permit a proper evaluation of the diverse
methods. It is entirely possible that the results obtained, for ex-
ample by Rollier with sun-light in cases of joint tuberculosis, may
be due in large part to other factors such as rest, climate, and ortho-
pedic measures. Further analysis of the conditions attending this
mode of therapy is essential. In the mere matter of dosage, opin-
ions still differ. Does erythema or pigmentation represent the
desired response? What of the untoward effects of over-dosage?
These, and many other questions await answers.
Clinically, light therapy does not seem to be effective in pulmonary tuberculosis, but in intestinal tuberculosis remarkable results have been secured, and in genito-urinary, peritoneal, and lymphatic tuberculous processes, as well as in tuberculosis of the skin the method has met with some success. But however effective light therapy may appear to be in selected types of infection, its value is evident only when it is used in conjunction with proper diet, hygiene, rest, orthopedic and surgical measures, and any other local or systemic treatment that has been shown to be efficacious in tuberculosis.

G. S. G.