There may be various causes for the disease. In some cases some abnormality in the kidneys or in their innervation is responsible. In others—and this is the larger group—it may be traced to changes in the vegetative synaptic stations in the floor of the fourth ventricle. Some primary disturbance in the pathways for thirst perception may be involved, in connection with the subcortical diuresis zones, possibly from irritation from concentration of crystalloid substances in the tissues. On the whole, conditions may be of psychogenic origin. A fourth possibility, that the disease is the result of abnormal conditions in the pituitary, has not been positively established to date. Even with loss of the diuresis regulating property of the pituitary secretion, normal compensating processes in the kidneys may ward off diabetes insipidus. Even if the pituitary be involved by definite structural changes the psychogenic factors are not excluded as dynamic.

Jacobson, C. HEMODYNAMIC REACTIONS OF CEREBROSPINAL FLUID AND HYPOPHYSEAL EXTRACTS. [Bull. Johns Hopkins Hosp., June, 1920.]

Human and bovine C. S. F. in concentration gives, when injected into other animals, physiologic reactions identical with those obtained from the use of various tissue extracts. These effects in the author's opinion are due to the presence of histamin. Definite evidence of a pressor substance in the C. S. F. from posterior lobe secretion is unknown. The pituitary gland does not give its secretion into the ventricles or into the C. S. F. Pituitary gland extracts show great variability on intravenous injection. They show a depressor effect. In general the authors conclude: (a) Anterior lobe exhibits depressor effect mainly. (b) Posterior lobe exhibits a moderate depressor followed by a specific pressor effect. (c) Pars intermedia had a small depressor, followed by a pressor effect. (d) Whole gland shows a neutralization of the depressor and pressor effects. (e) The posterior lobe secretion, if it is a specific secretion, is most probably produced in the pars intermedia and finds its way into the pars nervosa. The posterior lobe extract on intravenous injections appears to have an antidiuretic rather than a diuretic effect. Glycosuria is produced by intravenous injection of posterior lobe extract in a number of cases.

Steiger, M. RÖNTGEN RAY TREATMENT OF PITUITARY TUMORS. [Schw. med. Woch., June 24, 1920.]

The author has compiled the reports of twenty cases from the literature in which the pituitary was systematically exposed to the röntgen rays, all with definite indications of success. A woman of 32 who for seven years had had occasional headaches and for the last four years there had been impairment of vision in the right eye and for a year and a half in the left, is here described. The headaches had become more and more severe, spreading to the forehead, orbits and finally back of

the nose. Acromegaly was beginning and the sella turcica was large. The right disc was atrophied, this eye being blind; the left had vision of 0.06 after correction, 0.15 before. The röntgen rays were applied in crossfire from seven fields, for fifteen minutes each, from the brow, temples and anterior fontanel. By the second sitting vision was materially improved. Fourteen exposures were made in the course of four months, and vision constantly improved in the left eye and the right was able to recognize objects. A year later the acromegaly had almost completely subsided, but menstruation had not returned. The author thought that pituitary feeding might be added to advantage.

Pouliot, L. OBSTETRIC PITUITARY TREATMENT. [*Médecine*, April, 1920.]

Since pituitary extract has so strong a contractile power on unstripped muscular tissue, any mechanical cause impeding delivery is a contraindication to its use. To give more than 0.10 gm. of the fresh gland is dangerous. Intramuscular or subcutaneous injection are the proper methods of use. The dose should not be repeated unless the action of the first is exhausted, allowing a two hour interval.

II. SENSORI-MOTOR NEUROLOGY

2. MID-BRAIN.

V. Monakow, C. ADDITION TO v. ECONOMO'S TREATISE ON ENCEPHALITIS LETHARGICA. [*Schweizer Archiv. f. Neurol. u. Psychiat.*, 1920, Vol. 6, No. 2, p. 293.]

V. Monakow fully recognizes a certain independence of the disease which v. Economo, doubtless, was the first to describe and adds some remarks of histopathological nature. From his examinations of cases belonging to this group he places the point of origin of the pathological changes in the veins of the brain stem which are situated near the base. These changes are certainly most pronounced in the floor of the third ventricle, in the central gray matter of the aqu. sylvii, in the form. reticularis of the brain stem (region of the nuclei of the eye muscles), and he considers these veins as the starting point of the disease processes. On serial sections at a certain distance from the small disseminated extravasations of blood, infiltrated vessels, glia proliferations, accumulations of white blood cells, products of decay, etc., described by Economo, it was easy to discern in some of the medium sized veins white stratified thrombi, which were continued in smaller branches. The vessels thickly infiltrated with lymph cells, etc. (accumulations of swarms of lymphocytes in the adventitial sheaths) are usually the central continuation of these thrombosed veins. The congestion, in the author's opinion, is a secondary phenomenon specially conditioned by the white thrombi. The same is true of the capillary extravasation. In the brain tissue immediately surrounding the thrombosed veins there are zones of reaction