the suprarenal capsules (5 gr. altogether) and especially of the hypophysis. The latter was concealed in a very small and rather shallow sella turcica, showed no connection with the infundibulum and on microscopic preparation no posterior lobes could be revived. After fixation in formol the hypophysis weighed 180 mg. (average normal weight 700 mgr. for same age and sex). A microscopic series revealed a single posterior lobe and an anterior lobe subdivided by a multi-chambered cyst with psammoma granules, no trace of the hypophysis stalk. Testicles (those of a 3-year-old boy) and other genital apparatus very much underdeveloped; the seminal vesicle also showed almost complete aplasia.

Bate, R. A. POSTERIOR PITUITARY SECRETION IN THE TREATMENT OF MITRAL REGURGITATION. [Kentucky Med. J1., Nov., 1919.]

Regurgitation of the blood, from the left ventricle into the left auricle, during systole, takes place in any condition which prevents perfect closure of the mitral valve. Postmortem examinations have demonstrated the fact that the majority of regurgitant murmurs are permitted by myocardial changes. It is a universally accepted fact that myocardial hypertrophy compensates for the valvular deficiency. So long as compensatory hypertrophy obtains no systemic symptoms of mitral insufficiency are observed; hence, the treatment of mitral regurgitation has been based upon the establishment and maintenance of myocardial hypertone.

It has been shown that the blood regurgitating into the left auricle, while the right ventricle is pumping blood into the lungs, causes congestion of the pulmonary capillaries and dilatation of the right auricle. This is due to increased pressure in the right auricle where lowered pressure is normal during systole; hence, cardiac dyspnea, which is one of the first symptoms of mitral regurgitation, is the result of the pulmonary engorgement.

Hirschfelder, following von Basch, reasons that "the pulmonary stasis does not persist when the action of the left ventricle is sufficiently vigorous"; hence, he says "in the milder cases shortness of breath may be absent." Loomis, with much greater precision, states "so long as the hypertrophied right ventricle is able to fully overcome the abnormal pressure of the blood in the lungs, from mitral regurgitation, the patient is comfortable."

By and by cardiac hypertrophy is followed by myocardial degeneration and dilatation. General venous congestion now may be observed. As the lungs first indicated the primary vascular changes, so the blood enmeshed liver now indicates the secondary changes, which involve all the abdominal viscera. The renal, gastric and other symptoms result from visceral engorgement, just as dyspnea results from the pulmonary dilation and degeneration.

The investigations of McChord, of Ann Arbor, published in 1911, together with many other confirmations since have shown that posterior pituitary secretion constricts dilated blood vessels wherever present. The peripheral, renal, splenic, hepatic, coronary, pulmonary, leg and even embryonic vessels were especially tested by McChord. He thus summarizes: "These experiments show that the posterior-pituitary extract acts on all the vessels of the body,—with repeated administration there may be repeated constriction of the blood vessels."

It has been shown that posterior pituitary secretion diminishes the size of the heart and slows its rate of action. The heart is strengthened. The pressor and the depressor action of pituitary principle is personally believed to be evidence of the autacoid effect of the posterior pituitary principle upon the various endocrinous glands.

It has been shown that the heart has its own independent working system since it has been made to act for days without any connection with the central nervous system. It is suggested that this independent action is probably controlled by the posterior pituitary autacoids.

Sajous has shown conclusively that the action of digitalis is entirely due to its effect upon pituitary secretion. Posterior pituitary secretion has all of the good effects of digitalis without ever being contraindicated by heart block, toxemia, or from any cause whatever. Posterior pituitary principle in mitral regurgitation, then, is indicated because:

1. Its autacoid affect upon the heart produces cardiac excitivity, excitability, conductivity, contractility, and tonicity.

2. By its action in preventing and overcoming venous dilatation throughout the entire system, especially the thoracic and abdominal viscera, by these means compensating and entirely correcting any valvular deficiency. The author is sure that many cases of "rheumatic" endocarditis have been supported to compensating periods by posterior pituitary extract. [Author's abstract.]

Abt, I. A. DIABETES IN INFANCY AND CHILDHOOD. [Endocrinology, Vol. III, pp. 273-284.]

Abt emphasizes that the literature contains no extensive clinical studies on the diabetes of infancy and childhood and that experimental results fail to explain fully the clinical manifestations in man. Glycosuria occurs in the newly-born particularly where trauma has been caused by the application of forceps. Lactosuria occurs sometimes in prematures and in alimentary intoxications. He remarks that lactose and galactose are not easily demonstrated by the ordinary copper tests. He points out many other conditions in which glycosuria occurs.

The sexes are usually equally affected. The peculiar circumstance is remarked that in families affected with diabetes in several generations, the patients are younger the more advanced the generation. Abt's experience indicates that the predilection for diabetes is not