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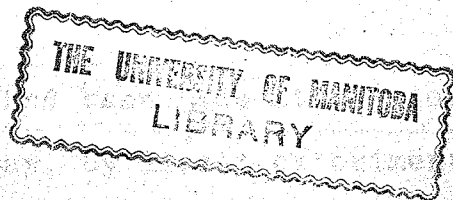
for the

DEGREE OF MASTER OF ARTS..

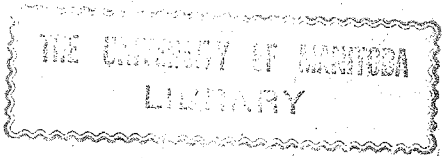
"ON THE EXTIRPATION OF THE ADRENAL BODIES"..

T. D. WHEELER,

April, 15..



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"ON THE EXTIRPATION OF THE ADRENALS"

T.D. WHEELER,

April, 1915,

A. THE COMPLETE EXTIRPATION OF BOTH GLANDS".

1. HISTORICAL.

Addison (2), when in 1855 he associated the disease which bears his name with lesion of the suprarenal capsules, gave an immense impetus to research upon these organs. All that had gone before served as the basis for the really profound yet fantastical doctrines concerning the functions of these glands.

Bartholmeus Estachius Santoseverinatus, the anatomist, first described them in 1563. The work of the next three centuries supplied all that was to be known microscopically of the anatomy, a certain small amount of the embryology, and the pathological histology. The keen research of the first half of the eighteenth century gave important data to the comparative morphology.

But no effort had been made at physiological research; that is to say, by direct experiment upon the living animal. True, Addison's observations from a clinical picture supplied the first contribution to the

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physiology of the adrenals; they show that these glands are necessary to the life of the animal, and that lesion of them gives very characteristic symptoms, namely, an idiopathic anemia associated with extreme apathy and adynamia, disturbances of the digestive tract and the nervous system, and a bronze coloured pigmentation of the skin and of the mucous membranes; whose course was chronic; which presented all the features of a progressive cachexia, frequently accompanied by violent symptoms, such as uncontrollable diarrhea, coma and convulsions. Addison reports, in every case which he examined, a serious disease, generally tubercular in character, of the suprarenal capsules. His conclusion was that the pathological conditions and the fatal terminations were due to the suppression of the function of these glands.

It was an effort to establish this disease artificially the experiments were carried out; naturally, the method adopted would be to extirpate, or in some other way produce a lesion of these glands.

## 2. PREVIOUS EXPERIMENTS.

Brown-Sequard (9) in 1856 was the first to publish any results of experiments upon animals. "He employed for the extirpation of both glands forty-four rabbits, nine guinea pigs, two rats, and several dogs and cats. All of these animals died in 9-37 hours after the operation. For the unilateral operation this experimenter used sixteen rabbits, five guinea pigs, two cats and two dogs. All of these died in 23-34 hours. Later he repeated the removal of one gland from two dogs, which survived for eight days". Vincent, "Internal Secretion". p. 134.

The following are the conclusions of Brown-Sequard;-

"La destruction des capsules surrénales entraîne toujours la mort à plus ou moins brève échéance.

La destruction d'une seule capsule, bien au'assez souvent mortelle, n'est pas toujours suivie d'une issue fatale. Les capsules surrénales sont des organes essentiels à la vie.