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CHAPTER I.

THE ADRENALS IN CLINICAL PATHOLOGY
AND THERAPEUTICS.SIMILARITY OF THE EFFECTS OF REMOVAL OF THE ADRENALS
IN ALL VERTEBRATES, INCLUDING MAN.

BROWN-SÉQUARD,¹ in 1856, demonstrated the physiological importance of the suprarenal capsules by showing that removal of these organs from animals was soon followed by death. To offset the conclusions of Phillipeaux and Gratiolet, who ascribed death to secondary involvement of the central nervous system, he extended his researches,² and showed, first, that transfusion of blood taken from a normal animal into a dying, decapsulated animal brought the latter to life, and, second, that the blood of a dying, decapsulated animal was poisonous to another decapsulated animal, the life of the latter being shortened by eight hours as compared to the average longevity of other animals similarly mutilated.

A certain degree of antagonism to Brown-Séquard's conclusions long prevailed among a limited number of investigators, who ascribed death in animals from which both adrenals had been extirpated to surgical shock—a view apparently sustained by the close relationship that exists between these organs and the sympathetic system. That such may be the case under some circumstances: *i.e.*, the use of an animal debilitated by starvation or rough handling, lack of dexterity in the extirpation of the organs, is to be surmised; but, when all features that tend to compromise the issue are absent, there is not the least ground for the view that shock is the cause of death in decapsulated animals. As shown by Langlois,³ no marked symptoms usually occur during the first twenty-four hours. The fatal

¹ Brown-Séquard: Comptes-Rendus de l'Académie des Sciences, vol. xviii, 1856.

² Brown-Séquard: Journal de Physiologie, vol. 1, 1858.

³ Langlois: Archives de Physiologie norm. et path., vol., 1897.