

Bartholinus, as I have before observed, believed them to be the secreting organs of the atrabilis of the ancients. Treviranus considered them incomplete rudiments of generative organs. Sir Everard Home thought they acted like a filter, "by which any oil left in the arterial branches that are near the kidneys may be separated and prevented from making its escape by the tubæ uriniferæ of these glands." Many moderns, classing them with the vascular glands, assign them an unknown office in the preparation and maintenance of the blood. The opinion of Wharton and Duvernoy, that the supra-renal capsules are ganglia of the renal nerves, has been revived and adopted by recent investigators. Kolliker considers the cortical and medullary portions to be physiologically distinct. The former he places with the ductless glands, the latter he believes to be an appendage to the nervous system. Carpenter says that the medullary bears no relation to the cortical substance, but is really a sympathetic ganglion; and he adds, "a curious observation strikingly confirmatory of this view of the peculiar relation of the medullary substance to the nervous system, has been recently made by M. Brown-Séquard, *viz*: that injuries to the spinal cord, in the dorsal region, produce congestion and (after a time) hypertrophy of the supra-renal capsules." The relation of the accessory capsules, observed by Rokitsansky, to the renal and solar plexuses, is, in our opinion, also strongly confirmatory of this view.

M. Brown Séquard has recently performed a number of experiments with the view of determining the effects of extirpation of the supra-renal capsules. From the results of these experiments he declares that they are as essential to life as the kidneys. He experimented on dogs, cats, guinea pigs and rabbits. "The average duration of life after extirpation of both organs was about eleven hours and a half. As yet even after the removal of but one capsule death has invariably resulted. The principal symptoms observed consisted in a remarkable debility, difficulty of respiration, disturbed circulation, and at length convulsions, giddiness, delirium and coma. He believes that after the removal of the capsules the blood becomes charged with a poisonous principle, which is the cause of death. Messrs. Flourens, Rayer and Claude Bernard have been appointed a commission by the Academy of Sciences, Paris, to examine M. Brown Séquard's statements.

"M. M. P. Gratiolet has also read a paper to the Academy of Sciences on the same subject. M. Gratiolet's experiments have been made on guinea pigs only, and do not appear to have been very numerous. His conclusions are as follow:—1. After the removal of the left capsule only, the animals recovered and regained perfect health. In one in-