

More rarely intra-cranial tumours or morbid growths have been found. But such obvious signs of disease were rare and evidently exceptional as accompaniments of diabetes; none occurred with such regularity as to suggest any necessary connection between the urinary disturbance and such cerebral changes, and their occasional detection threw little light upon the pathology of the overwhelming majority of cases in which the brain to ordinary examination was natural. Morbid anatomy so far having furnished nothing which could displace the functional or purely chemical view of the disease, I determined to examine anew with the improved means of modern microscopic research, and as comprehensively as I could, the organs of diabetic subjects. The results, which have been corroborated by subsequent observations, are given in detail in the *Medico-Chirurgical Transactions* for 1870. They point to the inference that diabetes is produced by substantial and constant changes in the nervous centres, none the less significant because, as with many other diseases of these structures, they are such as ordinarily to elude the naked eye. They are such indeed as to link symptoms with lesions as closely with natural as with artificial glycosuria, and to give to diabetes a definite place among diseases of the nervous system.

Diabetes, an isolated and well-defined disease in which the production of sugar is the leading symptom and chief source of danger, must not be confused with the glycosuria which is an unimportant, generally an unnoticed, and almost to be called an accidental complica-

'*Bulletins de la Société Anatomique*,' 1860, p. 247, and in the '*Comptes Rendus de la Société de Biologie*,' p. 24.

M. Lanceraux ('*Bulletins de la Société Anatomique*,' 1860, p. 221) describes the post-mortem examination of a diabetic subject in which the brain was softened, the ventricles dilated and their walls discoloured, while there was much injection with small extravasations about the calamus scriptorius, the nerve cells in this neighbourhood being broken down and occupied by yellow granulations. M. Martineau, '*Bulletins de la Société Anatomique*,' 1861, p. 290, describes changes about the fourth ventricle in a case of diabetes similar to those described by M. Luys. See also a case in which a somewhat similar condition was observed by Monveret ('*Gaz. des Hôp.*' Jan. 11, 1862).