

glands like the suprarenals produce an internal secretion: We must inevitably admit that the function of such secretion is to affect a chemical transformation of some substance or substances distributed in other parts of the body. We must admit that when, for example, the suprarenal bodies are diseased, or removed, some, at least, of the symptoms that follow are due to the absence of the internal secretion, or, in other words, are due to the accumulation in the system of the substance or substances acted upon by the internal secretion. The same symptoms must be produced whatever the cause of the accumulation of the substance or substances, whether by diminution of the internal secretion or by excessive production or assimilation of the aforesaid substance or substances. When, therefore, a morbid condition, such as diabetes or Addison's disease, which may be caused by destruction of a gland is found to exist without recognisable disease of that gland, a very possible explanation of the condition is what I have termed relative glandular inadequacy due to excessive production or assimilation of the substance acted upon by the internal secretion. I would but ask you clearly to picture this, that in diabetes and Addison's disease it is not the internal secretion that causes the symptoms, but, if experimental data are to be trusted, the lack of the same—and that this lack may be absolute or relative.

I am far from suggesting that the whole corpus of symptoms will be the same in both conditions. Thus as Harley and others have pointed out where the pancreas is atrophied there are profound digestive disturbances not necessarily accompanying diabetes unassociated with pancreatic disease. But I am inclined to think that the cardinal symptoms in both will closely resemble each other.

A few words only are necessary concerning affections of the suprarenal bodies without symptoms of Addison's disease. If bronzing be required as the one essential symptom then cases of tuberculous disease of the suprarenal without 'Addison's' are fairly frequent. Addison himself noted this condition. We must however, it seems to me, acknowledge with Chvostek (13) and numerous previous observers, that bronzing is but one of a group of symptoms even though we be not prepared to accept Bedford Fenwick's (14) suggestion that bronzing is especially connected with disease of the cortical layer. Leaving this category out of consideration, cases of extensive atrophic or neoplastic disturbance of both suprarenals without Addison's disease are few in number, far fewer than the cases of extensive pancreatic disease without diabetes, and in general the descriptions given are not sufficiently exact to be relied upon. Nevertheless they exist. Greenhow (15) apparently met with a case of almost complete atrophy without sym-