

is indistinguishable from that in gastric ulcer. Should the ulcer be infra-papillary, i.e. below the opening of the bile duct into the bowel, we find especially in the case of an ulcer of some standing and now contracting, first food particles, then bile and last of all blood vomited. I have observed and published a case in which this sort of vomiting was so typical and recurred so regularly that the patient could with his eyes closed give the nature of the vomit at any particular moment. (5) In the duodenal ulcer, *melæna* (blood in the motions) occur much more frequently than *Hæmatemesis* (blood in the vomit).

Unfortunately all these signs taken individually are by no means regularly met with. They may be present but they may also be absent. Everyone with personal experience in this field must admit that that so frequent variations are met with in regard to the nature of the pains, their frequency, their position, and their time of appearance that little use can be made of these facts in the differential diagnosis. The same remark applies to other symptoms mentioned when met with individually. Only if, and this occurs with great rarity, all the symptoms unite in an individual case, can we make the diagnosis of ulcer of the duodenum with comparative certainty. Even in such cases, no other complications must be present to change the clinical picture.

In this dilemma it is valuable to possess another diagnostic symptom—this is the demonstration of blood in the *fæces*, with its simultaneous absence in the gastric contents. In the majority of such cases, the blood is not macroscopically obvious, but is present in small amount recognizable only with the aid of the chemical test—the so-called “occult bleedings,” which in 1897 I was the first to draw attention to—or in the stools. The demonstration of blood in the stomach contents is made, as is well known, with *Guaiacum resin* or *Aloin* or *Benzidin* in the presence of resinous Turpentine oil or Peroxide of Hydrogen.

As these tests are very delicate and demonstrate quite a small amount of blood, e.g. the blood contained in three grammes of flesh taken with the food, the patient should take no flesh or other blood containing articles of diet for several days before the examination. Further in the event of posi-