

the case is atypical, be extraordinarily difficult or quite impossible to differentiate the conditions just referred to. This applies particularly to the question if the ulcer be located in the pyloric region of the stomach or beyond the pylorus in the duodenum. Affections of the gall bladder and perihepatic conditions on the other hand are as a rule—as opposed to gastric and duodenal ulcers—characterized by the fact that the pains appear irregularly and independently of food, that they resemble colic, that is, are more cramp-like, increasing and diminishing in severity and that prolonged intervals which may last weeks, months or even longer, occur between the individual attacks. The attacks, too, are in many cases attended by jaundice, persist frequently night and day without a break and do not disappear when the stomach is empty. Lastly, in these cases, there is usually no blood in the stomach or in the motions, and the gastric secretion is little, if at all, altered chemically.

This applies also to the diseases of the pancreas before mentioned which may betray their presence also by fatty stools and glycosuria, and possibly by a palpable immovable tumour. Under certain conditions, the age of the patient may also be of value for the diagnosis, calculi and tumours appearing mainly with advancing years while ulcer is most frequent from 20 to 40 years of age.

When by such considerations we are able to narrow down in an individual case the diagnosis to an ulcer, the difficulty begins of exactly determining its position.

The following characteristics have been laid down for *ulcus Duodenali*: (1) The pains appear later than in the gastric ulcer—3 to 4 hours after food. (2) The position of the pain is more outwards to the right. (3) The thickened pylorus is frequently palpable in cases of ulcer of the pylorus. The duodenal ulcer cannot be palpated as it is smoother and is not accompanied by compensatory hypertrophy of the muscular wall. (4) In gastric ulcer, the vomit consists of particles of food which are sometimes mixed with blood or of pure blood. In duodenal ulcer, the nature of the vomit depends on the position of the ulcer. If the latter is close to the pylorus, the vomit