

to prevent a catastrophe, which in a certain percentage of all cases is sure to come sooner or later—perforation—fatal hemorrhage—gastric cancer becoming engrafted on the base of an old ulcer.

*Acute Perforation.*—An acute perforation of a gastric or duodenal ulcer is not an uncommon complication, and unless prompt surgical measures are adopted every case must rapidly reach a fatal termination. When perforation has occurred, general peritonitis is rapidly established, and death cannot be delayed many days. The subacute form is not necessarily fatal, for protecting adhesions frequently limit the infection, and thus protect the general peritoneal cavity. In this class of cases the resultant condition is usually a localized abscess.

Duodenal ulcer perforates twice as often as the gastric variety. In gastric ulcer perforations occur more frequently in women, in the ratio of about 4 to 1, while duodenal perforations occur more frequently in men, the ration in this case being about 10 to 1.

Perforation in gastric or duodenal ulcer should be of rare occurrence, because, as a rule, the previous history is so clear that ample warning is usually given in time to forestall the occurrence of one of the greatest calamities which may befall the human being. However, the fact remains that even yet in a certain percentage of cases, some authorities place it even as high as 20, there may be no previous warning whatever, the disease may be comparatively latent, and the first indication of serious trouble the acute onset of a severe hemorrhage; hematemesis, as a rule, should the ulceration be on the gastric side of the pylorus; melaena if it be in the duodenum.

*Fatal Hemorrhage* from an ulcer is a complication of comparatively infrequent occurrence, though much more common in the duodenal than in the gastric variety. A severe hematemesis may result from gastric ulcer, and yet the patient quickly rally and rapidly recover, but in the duodenal variety such a happy ending must not be too confidently anticipated, especially if the hemorrhages are recurrent. The risk of fatal termination from this cause is an ever-present danger to one suffering from ulcer.

*Gastric Cancer* is perhaps the gravest complication which can befall the patient suffering from an old, deep-seated, chronic ulcer. That this should be productive of more fatalities than perforation or hemorrhage is because of its more frequent occurrence. Indeed, it may in the near future be decisively demonstrated that in every case of carcinoma of the stomach, by no means an infrequent malady, the disease is engrafted directly onto the base of an old chronic ulcer. At the present time over 70 per cent. of the cases can be thus demonstrated. In perforation, or hemorrhage, the diagnosis is comparatively easy, and