

on or independent of gastric or duodenal ulcer, but it is most frequently caused by perforating ulcer of the stomach or duodenum. Other causes are ulcerated appendix, abscess of the liver or kidneys, or various intraperitoneal troubles: it may also be due to extraperitoneal influences. I have described such a case as a sequel to empyema. Subphrenic abscesses are apt to be so large as to push down the stomach and the spleen on the left side and the liver on the right, raising the diaphragm up to the level of the third or fourth rib; they may even perforate the diaphragm, causing empyema, or burst through the lungs into a bronchus and so discharge their contents. In a large number of cases these abscesses contain gas, owing in part to communication with the stomach, or to the decomposition of their contents. At first the signs will be gas in a sac containing liquid associated with a perforated ulcer of the stomach or duodenum, together with pain in the epigastrium, possibly a gastric tumor, and the signs of local peritonitis. The differential diagnosis must be made from empyema, simple abscess of the liver or spleen, or pneumothorax. Theoretically the upper level of the diaphragm should in subphrenic abscess be concave, with the concavity upward so that the upper limit of the abscess should correspond to this upward curve of the diaphragm. On the other hand, in simple empyema the curve of the diaphragm should be downward. In these cases of subphrenic abscess, according to Penrose and Dickson, including the thirty-four cases collected by Weir with fifteen cures, Nowak estimates his cures at fifty-five per cent. The treatment should be incision with or without excision of the rib and drainage. I should be disposed from my experience to recommend thorough drainage as originally recommended by Chassaignac. If the diagnosis of a subphrenic abscess is made, a surgical operation should be considered at once.

There is no difference in anatomical characters between the ulcer of the stomach and the duodenum; in fact, the non-malignant ulcer that has been described, with its sharply cut edges and rounded contour, may be found as well in the duodenum and esophagus as in the stomach: for the gastric juices can under appropriate conditions act in all these localities. In fact, the causes of the one ulcer are equally well those of the other, except perhaps that burns have a special tendency to be associated with duodenal ulcers (in from twelve per cent. to four per cent. of burns). As in the stomach, these ulcers are usually found in a middle period of life, but there is this difference, that in men they are three times as frequent as in women. Duodenal ulcers are usually found near the pylorus on the inner or posterior walls of the bowel. In a large number of