

various forms, but in order to make the position clear I will relate the other etiological conditions:

*The etiology of pancreatitis may be classified under predisposing and exciting causes. Among the predisposing causes are: (1) Obstruction in the ducts, the result of gall-stones, duodenal catarrh, pancreatic calculi, cancer of the papilla or of the head of the pancreas, ulcer of the duodenum, followed by cicatricial stenosis of the papilla, ascarides, and lumbrici; (2) injury either from a bruise, as by manipulation in operating, or from a crush, as by a blow in the epigastrium, or from wounding by a sharp instrument; (3) hemorrhage into the gland; (4) general ailments, such as typhoid fever, influenza and mumps; (5) certain anatomical peculiarities in the pancreas or its ducts; (6) atheroma or fatty degeneration of the blood vessels; (7) new growth, e.g., cancer or sarcoma.*

The chief exciting causes are: (1) Infection conveyed (*a*) from the blood, as in syphilis or pyemia; (*b*) from the duodenum, as in gall-stone obstruction or gastro-intestinal catarrh; (*c*) by extension inwards from adjoining organs, as in gastric ulcer or cancer eroding the pancreas. (2) Irritation, as in alcoholism (doubtful).

So long as the concretions remain in the gall-bladder or cystic duct, it is unlikely that the pancreas will participate in the cholecystitis, unless the gland has been originally infected from the duodenum, as possibly occurred in the following case: In this case, gall-stones in the gall-bladder were associated with catarrh of the pancreas, which must have either been due to an extension of the catarrh of the gall-bladder and bile ducts to the pancreas, or have resulted from the passage of a gall-stone from the common duct on some former occasion, which had led to infection both of the bile and pancreatic ducts. A lady, aged fifty, had for several years suffered from attacks of distinct biliary colic, which during the past two months had been followed by jaundice, fever and collapse. There had recently been loss of flesh. On examining the urine, fine pancreatic crystals were discovered, and at the operation on April 30th, 1903, forty gall-stones were removed from the gall-bladder and cystic duct. None were found in the common duct, though the head of the pancreas was distinctly swollen and harder than normal. The gall-bladder was drained. The patient made a good recovery and is now well. Normal weight has been regained, and there is no longer any evidence of disturbed metabolism.

Even if gall-stones pass into the common duct and are not