

organic disease. Such cases may assume the appearance of the early stages of acute yellow atrophy, so that in children when the jaundice does not abate within a week, and still more, if it increases, a guarded prognosis should be given.

Gall-stone jaundice is easily excluded if the symptoms are definite—by the attacks of sudden pain and the jaundice increasing with each attack of pain; but remitting in the interval; by the history of preceding attacks of gall-stone colic; and often by the associated paroxysmal hepatic fever. But gall-stones may cause little pain and tenderness, and be thus indistinguishable; in such cases, however, the jaundice is catarrhal. In malignant disease, in which the jaundice is always partly due to catarrhal swelling, the loss of flesh, cachexia, ascites, tumor, and nodules in the liver serve to distinguish the more grave lesion.

In cirrhosis the slight jaundice, more advanced age, previous history, and ascites, are usually sufficient to differentiate. Hypertrophic cirrhosis is distinguished by the large liver, the ascites, the more advanced age, and the chronic course.

(b) *Chronic Catarrhal Cholangitis* is rarely a sequel of the acute affection, but usually results from the continued irritation of some persistent cause as gall-stones, carcinoma, etc., implicating the bile ducts, or pressure from without. The mucous exudate may be so inspissated as to cause attacks of colic which may be indistinguishable from those due to gall-stones. There is, however, usually little if any increase of jaundice in such colic, as there is in colic from gall-stones in the common duct. In these chronic cases the inflammation may extend through the duct wall and affect the peritoneal covering and adhesions to surrounding structures follow. Such adhesions may give rise to severe pains resembling colic; they are usually less distinctly paroxysmal, but tend to be more continuous with exacerbations like inflammatory pains.

2. *Suppurative Cholangitis and Cholecystitis*.—This is called *Infective Cholangitis*, but the term is not well chosen, as inflammation of the tract is always infective.

The results of infection depend rather on the degree of impediment to the flow of bile than on the inherent qualities of the infecting organism. The more complete the arrest of flow the more virulent is the infection likely to become. Normal bile is sterile, and organisms are not easily grown in it, not because of its antiseptic properties, but owing to its poverty as a nutrient medium. If there is a free flow of bile the organisms have little opportunity to grow and develop malignancy, but if the flow of bile is obstructed they flourish in the exudate that takes place from the diseased passages. Probably there-