

This may, in many instances, be of short duration, and the obstruction being removed, there will be an entire subsidence of the symptoms. In other cases, an acute suppurative cholecystitis may supervene, and relief be obtained only after surgical interference.

*Empyema* of the gall-bladder is a common accompaniment of gall-stones. When a stone becomes impacted in the cystic duct, the gall-bladder, as a result of the accumulation of secretions, may attain a very great size. The presence of micro-organisms will produce an infection, suppuration ensue, and the gall-bladder be converted into an abscess sac. Should adhesions be present, as is almost invariably the case in empyema, the organ will be fixed. In the absence of adhesions it may be quite freely movable.

A stone may become lodged in any part of the common duct. Should it be tightly wedged, the jaundice will be deep and enduring. Should it be of the ball-valve type, the jaundice will be more intermittent and transient. A common location is the junction of the cystic and common ducts, where the stone rests partly in each canal. Another common location is the diverticulum of Vater. In common duct obstruction the gall-bladder rarely becomes enlarged, though the common and hepatic ducts may attain a very considerable size. The hepatic branches throughout the liver may also become greatly enlarged.

In *infective cholangitis*, from incomplete common duct obstruction by stone, the patient will suffer from intermittent but repeated attacks of chills, followed by an immediate rise in temperature. This febrile reaction usually reaches from 102° to 103° F. Pain is not a marked symptom. The chills may recur daily, or less frequently, and after each seizure the jaundice may deepen in intensity. Icterus may be intense. Nausea and vomiting are, as a general rule, a marked symptom. These attacks may recur at indefinite periods for years without the development of suppuration, until which time there is frequently no permanent loss of health. In attempting to ascertain the primary condition productive of the existing infective cholangitis, the condition of the gall-bladder is a valuable sign to go by. In practically all cases where the lodgment of a stone in the common duct is the primary cause, the gall-bladder will be found to be either normal in size or contracted. Should the occlusion of the common duct be the result of other causes, the gall-bladder will almost invariably be found to be considerably dilated.

In *suppurative cholangitis* we simply have the former condition in an intensified form. Suppuration may develop in any part of the biliary tract, and, spreading upwards through the hepatic ducts, develop focusses of infection with localized abscesses throughout the liver. Empyema of the gall-bladder is also a common accompaniment. In the