

signs of local inflammatory conditions develop, with tenderness to pressure and rigidity of the overlying muscles, we should not then neglect having the blood examined to determine the presence of hyperleucocytosis. I regard this procedure as one of our most important modern aids to diagnosis. I have repeatedly found it of the most timely service in indicating the danger of delay, where there were reasons for suspecting suppurative processes in connection with the biliary passages, yet the exact nature of the local trouble was uncertain. Should the febrile condition be also accompanied by repeated sweats, pus formation becomes still more probable, but these signs do not tell us certainly where the pus is, for it may be collected in one or more abscesses, or be diffused, as in suppurative cholangitis, as we shall see in discussing the indications for surgical measures.

The repeated irritation of the liver by biliary calculi is very prone to disturb gastric digestion as well. The symptoms then are of a subacute gastritis, causing a painful uneasiness after meals, with tenderness at the epigastrium and with a more or less constant sense of distention. Hyperacidity is quite common. In proportion to the continued hepatic derangement, especially when fever is a frequent symptom, the general nutrition suffers, and if jaundice also persists, emaciation becomes pronounced. A vicious circle sometimes seems to be present, of hepatic irritation causing gastric derangement, and this in turn, with its acid fermentation of the ingesta, increasing the inflammatory condition in the biliary passages. Careful attention to the attendant dyspepsia is therefore a leading indication in the treatment of cholelithiasis.

Now, all these symptoms of cholelithiasis which we have been reviewing may be present, either severally or conjoined, and yet not be due to cholelithiasis in any form. We have already enumerated the cases in which this is true of the symptom pain, but the same may be said of the other symptoms, tumor, jaundice, and fever.

Thus, tumors may be found occupying the anatomical area of the gall-bladder and ducts, accompanied with intense jaundice, and occasionally with pain, rigors and fever. The presence of these last symptoms may make the differential diagnosis very difficult, for, as remarked above, new growths which cause biliary obstruction and jaundice, as a rule, are painless and afebrile. If, therefore, we find a persistent jaundice coexisting with a palpable hard, and especially a nodular tumor, we have good reason to diagnosticate obstruction by a neoplasm as the cause of the jaundice. But cancer of the liver sometimes causes suppurative inflammation, as in a hospital case of mine, in which, with antecede-