history of gall-stones do any stones pass through the cystic into the common duct, so that in only a minority of cases will gall-stones interfere with the flow of bile from the liver; it is only in the "successful," not in the "unsuccessful" attacks that jaundice occurs (Riedel). If the stone does not gain access to the common duct jaundice follows the attack of colic in one or more days after its escape from the cystic duct. Its amount and duration will depend on the degree and duration of the obstruction. As soon as the stone passes into the intestine and the obstruction is removed the bile flows freely again and the jaundice rapidly disappears. The stone, however, may become impacted in the duct, or lodged in the ampulla just above its outlet. The obstruction will cause dilatation of the duct with distension especially around the stone; this allows the stone to float backwards and bile escapes, and the jaundice lessens until the stone again blocks the passage. The process is repeated and continues so long as the "ball-valve" action of the stone continues. With these recurrences of obstruction there may be repetitions of chill and fever. This variation in the jaundice is almost pathognomonic of gall-stone obstruction as jaundice from other forms of obstruction usually remains unabated while the obstruction lasts. Gall-stone obstruction rarely gives rise to unvarying persistent jaundice unless the stone is lodged at the outlet of the duct into the intestine, a rare event. In gall-stone jaundice the liver is rarely much, if at all, enlarged, and the enlargement takes place more slowly than in jaundice from carcinoma.

Fever of the intermittent hepatic type is not uncommon in the cholangitis associated with gall-stones, and is of serious import in proportion to its severity and continuance. If with it tenderness in the gall-bladder area with spasm of overlying muscles, the development of a tumour in this region, and rapid increase in leucocytosis occur, there is little doubt of pus formation in connection with gall-stone obstruction.

Tumour as a result of gall-stone obstruction is not common because of the inflammatory thickening of the wall of the gall-bladder which usually precedes and accompanies the formation of the stone. If the changes in the gall-bladder are but slight a plug in the cystic duct may cause great distension of it by mucoid fluid secreted from its wall. It then forms a smooth pyriform tumour with its large end towards the umbilicus, freely movable at its lower end and fixed to the liver above and moving with it. If not too much distended and a number of stones are present, and if the abdominal wall is thin and relaxed, crepitus is sometimes obtained on manipulating the tumour. There are, however, a good many "ifs" to be provided for before this sign is obtainable. Such a tumour has to be differentiated from tumour