

presence of such calculi, or where turbid secretions can be expressed through the cystic duct, choledochotomy should be carried out. In ninety-two choledochotomies fistula and stricture formation occurred in one case only.

For all deep sutures Körte has returned to iodine cat-gut as the most satisfactory.

The classic symptoms of gall-duct stone—icterus, the absence or diminution of bile in the fæces, colic, chills and fever, and the absence of palpable gall-bladder dilatation—are by no means always present. The differentiation of this affection from tumour occlusion may also be most difficult, and while one can from operative procedure obtain good results in cases of occlusion by stone even under critical conditions, it is quite otherwise in cases of gall-duct occlusion through tumour, where the chances of a favorable outcome are small.

In ninety-two cases icterus was twenty-five times either absent or very slightly observed. In some of these cases the choledochus concretion was small: in other cases, however, there were found medium-sized and quite large concretions. Two cases of icterus were observed in the absence of stone, due to inflammatory swelling of the papilla.

Riedel has drawn attention to insidious cases in which periodical attacks of fever and chills, followed by slight icterus or perhaps without icterus, and associated with weakness, arise as a result of choledochus concretion.

A small, shrunken gall-bladder is usually associated with occlusion by stone—a large, palpable gall-bladder with obstruction by tumour; and while this Courvoisier-Terrier law holds good on the whole, there are many exceptions (thirty-five per cent in Körte's series).

A retroduodenal position of the stone was met with nine times. In only three cases was duodenotomy performed in order to remove papillary stones. Körte has not noticed any bad results from this procedure, but avoids it if possible.

Körte employs drainage of the gall passages in all cases of choledochotomy, the drain remaining in from ten to twelve days, and in exceptional cases longer. Further, in all such cases a drainage tube is placed in the field of operation, to provide for escaped secretions or plugging of the duct tube. Körte has seen but one persistent gall fistula after the removal of the drain. Sometimes gall escapes for a time, but as a rule the fistula closes quickly if all stones have been removed.

Where stone obstructs the gall-duct the gall is often turbid or distinctly purulent. In seven of Körte's cases where no stone was met with turbid infected gall was withdrawn and a drainage tube inserted.