

with colon bacillus and streptococcus. There is rapid infiltration of the wall of the gall bladder with exudate and infective thromboses of the veins. This leads to a necrosis. At the same time there is an extensive involvement of the peritoneum, as shown by the mass of organized lymph surrounding the gall bladder.

Dr. Ransohoff mentions a case of rupture of the common bile duct as a consequence of gangrene of the wall, followed by a peculiar sign to which attention had never been called before; there was a localized jaundice affecting the area of the navel only. At the operation bile was found staining the peritoneal fat. He considered that this jaundice was the result of inhibition. It makes itself manifest first in the integument of the navel, as this part is thinner than the rest of the abdominal wall. He remarks that total gangrene of the gall bladder has not as yet been observed, except in the case he presents, as an affection independent of gallstones, and he considers total gangrene of the gall bladder a very rare condition. Czerny ascribes gangrene of the gall bladder to pressure on the cystic artery, which, except for a very insignificant anastomosis along the attached surface of the gall bladder, is practically an end artery. In Czerny's case the gangrene was limited to the mucosa of the gall bladder; in Ferguson's case most of the gall bladder came away as a slough five weeks after the operation.

When this subject was discussed in New York after the presentation of Dr. Hotchkiss' paper in 1894, Dr. Gerster said that he had never had an opportunity of observing a case of gangrenous empyema of the gall bladder. Dr. McBurney said he had operated a number of times on the gall bladder and had never yet seen a case of gangrene. He had met with many cases of gangrenous inflammation of the vermiform appendix. He contrasts the two organs and says that while one is frequently gangrenous the other is very infrequently so. He suggests as an explanation the toughness and non-vascularity of the gall bladder walls in contradistinction to the soft and vascular walls of the appendix, the vessels of which become rapidly plugged with bacteria. As an active feature in each case we have the interference with drainage.

In the same discussion Dr. Abbe stated he had seen a case of acute phlegmonous inflammation of the gall bladder, and when he operated he found that the mucous membrane, the cellular tissue and the peritoneal layer of the gall bladder slipped up and down upon each other so as to be readily dif-