

Upon tapping, turbid grayish-green fluid was removed, and subsequently the gall-bladder itself was incised, and 150 small faceted cholesterin calculi were removed. The margin of the artificial opening in the gall-bladder was next stitched to the peritoneum and the usual surgical toilet performed.

The patient, however, failed to recover well from the operation, and at the end of the second day succumbed to the disease. Only a partial autopsy was permitted, but sufficient to show the typical lesions of typhoid fever in the intestines and the subacute inflammation of the gall-bladder itself with the more or less subacute pericholecystitis.

Cultures were obtained at operation from the gall-bladder and micro-organisms obtained which responded to all the tests for the *B. typhosus*. The fluid itself when examined in the fresh state revealed actively motile bacilli which agglutinated and became stationary when brought into contact with the blood serum of a patient affected with typhoid fever. The bacilli when later cultivated gave the same reaction of Pfeiffer, thus establishing beyond a doubt the identity of the microbe present in the gall-bladder. In addition to our own investigations, Dr. J. G. Macdougall made entirely independent tests and likewise identified the bacteria as those of enteric fever in pure culture.

In orienting ourselves again as to the special features in the diagnosis, there are several which in a way were seemingly characteristic.

The sudden alteration in the course of the disease, with development of a subnormal temperature, and sudden pain in the abdomen might have suggested perforation of the intestine, but the pulse remaining quiet and strong this was practically excluded. The symptoms, too, were intermittent, with periods of comparative freedom from pain and anxiety, which too has been a feature prominent in many similar cases of typhoidal cholecystitis. Add to this the tongue of liver pulled down by the gall-bladder, as first shown by Riedl, and we have a series of suggestive symptoms for the diagnosis. Jaundice was, of course, not to be expected as the bile passages elsewhere remained free.

The question of operation, while always a grave matter in cases of typhoid fever, was here a positive necessity, and from the thinned condition of the gall-bladder wall had undoubtedly anticipated an impending perforation. While the case recorded by Mason of successful tapping of the gall-bladder in a somewhat similar instance is of remarkable interest, yet the presence of calculi in our own case necessitated a more radical means of treatment.