

stomach and then bile stained mucous. The pain often ceases after the vomiting, and this gives rise to the impression the whole trouble is of gastric origin; but, provided the stone has not passed, another paroxysm soon comes on. If the attack is severe and of long duration, the patient exhibits signs of collapse, the skin becomes clammy, he is chilly, pulse is slow and respirations are labored. During the attack or shortly after, the temperature may rise to 103° F. or higher, and be accompanied with a rigor of short duration; this is probably caused by absorption of septic micro-organisms or their chemical products into the blood stream, and could be compared to what we used to designate "urethral fever" after the passage of a catheter. The attack of colic usually terminates suddenly, the stone getting into a wider channel, all symptoms abruptly end, and the patient is transferred from a condition of torture into one of delight. After an attack, the stools of the patient should be examined, the finding of the calculus of course clinching the diagnosis. The best method of searching for these is to use a wire sieve the meshes of which are about one-twelfth of an inch square, and pass the excreta diluted in a weak solution of carbolic acid through this.

I have as yet not mentioned jaundice as a symptom of gall stones; but if a calculus becomes impacted in the common bile duct and the obstruction is complete or almost complete, jaundice develops; the discoloration of the skin lasts for several days after the calculus has escaped. If the calculus remains impacted the jaundice may last for a long time. I have notes of one case where the jaundice came on with an attack of colic, in February, 1896, and persisted, becoming very intense, until June of 1898 when the surgeon, Dr. J. F. W. Ross, removed the stone from the common duct, the patient, a man sixty-eight years of age, making a complete recovery. If the calculus becomes impacted in the cystic duct jaundice does not usually occur, there being no interference with the course of the bile to the duodenum, unless there be sufficient pressure exerted on the common duct from without, the same as might be occasioned by a tumor.

I have been struck by the great loss of weight and variations in weight to which one the subject of cholelithiasis is liable. I mention this more especially as a factor to be taken into account in differentiating gall stones from malignant disease. The patient to whom I referred a moment ago, as having had a stone impacted in the common duct so long, fell in weight in twelve months from 170 pounds to 110 pounds. Another case, a male aet. 56, in the spring of the year 1902 weighed 185 pounds; in July he fell to 130 pounds; in August, when I saw him first, he was 142 pounds. In January, 1903, he weighed 150 pounds,