

ous with a dullness extending to the right iliac crest. By aspiration of the chest 180 ounces of pus were removed, but no other operative interference was advised because the man was dying. So eager was I to make a post mortem of this case that I remained all night and refused to sign a death certificate myself or allow my colleague to sign one, until the cause of death was ascertained. Finally the relatives consented, and we found a retrocecal sloughing appendix in a huge abscess, and no sign of peritonitis. Upon questioning his wife and brother, it was learned that this man had had a severe attack of so-called inflammation of the bowels twelve years previously. The provocation of the attack which caused his death was fatigue and exposure. Here was a case that had made an apparent complete recovery for twelve years. This is only one of several cases in my own experience illustrative of the predisposition established by one attack of appendicitis and freedom from subsequent attacks for a time, ranging from one to eighteen years.

While the medical treatment has shown the recovery of a few cases of appendicitis without operation, it is our duty to emphasize the tendency to subsequent attacks, which should receive early surgical attention. This evening so much has already been said upon the indications for operation, with which I in the main agree, that a few remarks on the negative side of the question may not be inappropriate.

WHEN NOT TO OPERATE.

The symptoms and signs of a typical case of appendicitis are so unmistakable that an error in diagnosis is not likely to occur with the best men.

1. Do not operate for the first attack of appendicular colic. I have been in the habit of jocosely referring to it as "constipation of the vermiform appendix."

2. Do not operate when the diagnosis is in doubt, unless the affection to be differentiated from appendicitis demands interference.

3. Do not operate during the height of the inflammation between the 4th and 8th

days or during its decline, unless life is in danger from (a) sepsis manifested by high fever, 103 F., and over rapid pulse, 120 or over, delirium, etc.; (b) symptoms of perforation; (c) presence of a tumor, especially in the east, southeast or northeast quarters of the appendicular region; (d) no improvement in the 5th or 6th days. Long before surgeons knew anything about sepsis and asepsis it was a rule of surgery not to operate on diseased tissue during the acme of inflammation, for they had learned by sore experience that fuel was added to the fire there raging. It is only since bacteriological development that a satisfactory explanation of this surgical rule has been given.

4. Do not operate after the first attack, unless (a) tenderness persists; (b) a tumor exists; (c) symptoms of obstruction of the bowels ensue.

5. Do not operate during first attack, if the pain and pyrexia are subdued by purgation, unless the suffering, fever and sign of approaching perforation, and no rapid pulse return, which is an unfailing further expectancy should be countenanced.

6. Do not operate when other grave constitutional diseases coexist.

It will be observed from the above that in my opinion appendicitis is permanently a surgical affection, almost invariably in its acute stages, and absolutely so when it has become chronic. The best results are obtained in acute cases by operating within 24 or 36 hours of the onset of the attack, and in the chronic cases between the attacks.

IRRIGATION AND FLUSHING.

While it is generally conceded that irrigation and flushing of the general peritoneal cavity is the correct thing to do to remove septic material from it brought there through the bursting of an abscess or suppurative peritonitis, still the opinions of surgeons are not so unanimous upon the advisability of washing out appendicular abscesses that have been opened by operation. It is claimed, on the one hand, that more septic material is removed by flushing, that the operation