

subject was a young, vigorous man, who was taken severely sick with peritonitis and died at the end of the third day. The whole abdominal cavity was in the condition of septic inflammation; the appendix was perforated and sloughing, containing a cherry pit, and the cæcum almost gangrenous and also perforated. In such cases there generally have been previous attacks of appendicitis, though in this instance no history of such could be obtained.

If an abscess has formed, the pus may find its way under the abdominal walls or into the retro-peritoneal tissues, or it may rupture into the general peritoneal cavity, or into an intestine. Within three months I have seen two cases with rupture into the bowel. In one, a boy of 16 years, the only thing he complained of when he consulted me was inability to walk on account of stiffness and contraction of the flexor muscles of the thigh. An examination revealed a deeply-seated mass in the right iliac fossa, tender on pressure. As this mass, in spite of rest and appropriate treatment, increased in size, it was decided to operate. On the morning of the day set for the operation he had a number of stools containing evidences of pus, and the mass had almost disappeared. The other case had two attacks of appendicitis within three months, during the second of which the abscess ruptured into the bowel. In both this accident was followed by rapid recovery.

The disease may produce no symptoms outside of those of an ordinary indigestion, so long as it is confined to the mucous surface of the appendix. Severe symptoms point to a more violent inflammation not confined to the appendix alone. Such cases may be ushered in by vomiting, and sometimes purging, accompanied with severe pains, particularly in the ilio-cæcal region; the pulse is accelerated, temperature often high, face anxious. On pressure, we find tenderness over the seat of the disease; the abdominal muscles over the region are tense and rigid. Tympanites may supervene. These symptoms may continue three or four days and then gradually subside. In many cases a tumor can be felt in the region of the appendix. If these symptoms continue unabated beyond the third or fourth day, especially if tympanites increase, the pains remain severe, the pulse becomes accelerated, the temperature rises to 102° or 103° perforation and formation of abscess may be looked for. Cases beginning with violent symptoms, intense pain, severe vomiting, marked tympanites, great tenderness in the ilio-cæcal region, which rapidly spreads over the whole abdomen, rapid pulse, are of the gravest nature and denote perforation into the general peritoneal cavity. A pulse of over 120, with rapid breathing, slight cyanosis, are extremely bad prognostic symptoms, as they are the expression of toxic effect on the action of the heart.

Frequently appendicitis does not have a typical course, and its diagnosis may be very difficult. The pain may be referred to other parts of the abdomen, the cæcum being such a movable organ that displacement and change of position are not infrequent. Then, again, it may be disguised by other symptoms or complications, such as strangulation or obstruction of the bowels. Ransohoff reports twelve cases in which appendicitis ran its course without any other symptoms than those of internal strangulation of the bowel. Hartly also reports two cases in which an operation was performed for internal strangulation, which proved to be intestinal obstruction, from adhesions to the wall of an abscess formed by a gangrenous appendix. It would therefore be well in all obscure acute cases of abdominal troubles to keep in mind how frequently appendicitis bears a causative relation to many of these acute affections of the peritoneum. In obscure cases "McBurney's point" may be of some diagnostic value. In McBurney's experience in every case "the seat of greatest pain, determined by the pressure of one finger, has been exactly between an inch and a half and two inches from the anterior superior spinous process of the ilium on a straight line drawn from the process to the umbilicus. This point indicates the base of the appendix where it arises from the cæcum, but does not demonstrate that its chief point of disease is there."

The large majority of cases of appendicitis recover. Statistics in regard to the mortality of the disease differ greatly, however. It is a remarkable fact that German statistics show a much more favorable prognosis than those of America. Dr. Fred Lange, of New York, thinks that either appendicitis in America is more fatal than in Germany, or else the very severe cases in that country do not go to the hospitals, from which such statistics are derived. He says "Americans eat much, particularly concentrated food, masticate very little, and suffer from constipation," and are, therefore, particularly liable to this disease. Rensers treated at the university clinic in Berlin, within four years, fifty-four cases of which three died. It is also stated that out of 2,000 cases of inflammatory conditions in the right iliac fossa in the German army, 96 per cent. recovered without operation. Nothangel treated at his clinic in Vienna from 1882 to 1890, 65 cases, 55 men and 10 women, two-thirds of them between the ages of 11 and 30 years, with a mortality of three. Matterstock, however, gives out of 177 cases 30 per cent. mortality; of 70 children under 15 years, 70 per cent. Fitz, in the *Transactions of the Association of American Physicians*, states that he observed 72 cases, of which 74 per cent. recovered and 26 per cent. died.

Simple cases of catarrhal appendicitis usually make a speedy recovery under treatment by absolute