

clear the moment the knife enters the peritoneal cavity; pus will gush out and the nature of the trouble will be soon revealed. I believe that we will more frequently find obscure cases in which the diagnosis lies between internal strangulation of the bowel and appendicitis with purulent peritonitis, to be cases of appendicitis than cases of internal strangulation. Cases have been operated upon in which the abdomen has been opened and explored in all directions and nothing found until at last, the operator has pushed his fingers deep down into the ilio-cæcal region. Such a patient may perhaps have been suffering from symptoms pointing to typhoid fever, or to the so-called typhomalarial fever, or, to some obscure septic condition with no definite symptoms to aid one in making a positive diagnosis. In my own operations on such cases I always explore the region of the appendix first.

Swelling of the right testicle has been noticed in some cases. Some years ago I had a case that I now believe to have been one of appendicitis, although at that time I diagnosed it as one of those mythical post-peritoneal abscesses, in which there was swelling in the spermatic veins on that side, during convalescence.

Some time ago I saw a case in consultation that I took to be one of typhoid fever. I still believe that it was one of typhoid fever, but as a complication, swelling of the right testicle occurred, and the patient suffered subsequently from a phlebitis on the right side, affecting the femoral vein. There is something interesting in this ground on which two diseases seem to become so closely allied, namely, the phlebitis that has a tendency to occur in cases of appendicitis and the phlebitis that frequently follows typhoid fever. The veins of the scrotum or leg are the only ones that show outward signs of phlebitis.

*Diagnosis and differential diagnosis.*—Appendicitis may be confounded with many diseases and many diseases may be supposed to be ones of appendicitis. The diagnosis in many cases is very difficult, and in many cases it is very easy. It is easy to make a diagnosis in cases in which, after the commencement of the attack with symptoms pointing to a localized inflammation of the peritoneum, a tumefaction in the right iliac region is found. In such cases the history must be taken into consideration and will be found of great service to

the practitioner. If such a tumefaction be found in a woman subsequent to labor, the chances are that it is either a pelvic abscess with pus burrowing in the plains of connective tissue, intending, ultimately to point in the right iliac region, or it is a pus tube entirely intra-peritoneal. If such a tumefaction be found subsequent to a miscarriage it is also likely to be pus either in the tube or in the sub-peritoneal connective tissue. Cases of appendicitis have undoubtedly been known to occur immediately subsequent to labor or miscarriage, but this must be the exception and not the rule. I know of no way in which we can exclude appendicitis in cases with such a clinical history. If the patient has had previous attacks that have been diagnosed as ones of appendicitis we must take this fact into consideration in forming our conclusion as to the origin of the inflammation.

When cases occur with the symptoms of acute peritonitis, such as persistent vomiting, chills, collapse, rapid pulse and abdominal tenderness, they may readily be mistaken for cases of intestinal obstruction, or of internal strangulation of the intestines, or of strangulated hernia. I have been unable to make a positive diagnosis in one or two such cases until after incising the peritoneum.

The constipation, spoken of by some authors, I have not found to be constant in cases of appendicitis. The movement of the bowels subsequent to the primary invasion, would, perhaps, exclude the diagnosis of intestinal obstruction from any cause, but if constipation is present from the very onset of the disease, it is then difficult to determine the exact nature of the intra-peritoneal lesion. In some cases of strangulation of the intestine in which only a small portion of the entire lumen of the intestine is obstructed, we have movements of the bowels occurring subsequent to the onset of the attack. The vomiting subsequent to perforation of the appendix is sometimes quite as persistent and pronounced as the vomiting following intestinal obstruction. In intestinal obstruction, however, we are not likely to find rigidity of the right rectus muscle, nor are we likely to discover McBurney's point, but, on the other hand, perforation of the appendix may occur and we may not be able to discover rigidity of the right rectus muscle or McBurney's point. The diagnosis of peritonitis produced by perforation of the vermiform appendix from peritonitis, produced by per-