small opening, usually at the bottom of a small ulcer formed by the destruction of a solitary gland; or a number of small cribriform openings may form at the base of a sloughing Peyer's patch. In such cases the peritonitis will usually be localized at first, and become rather slowly diffuse. A *third* form is described; after the sloughing and ulceration has extended to the subserous tissue rupture of the serous coat may result from various causes such as the tension of peristalsis excited by irritant contents as milk curds and other undigested food; pressure on the abdominal contents during straining at stool or by external pressure; *injury by coarse particles in the contents of the intestine, as the outer* coat of grain in unstrained gruel, etc. In these cases, the opening being large and suddenly formed, the intestinal contents escape rapidly and widespread infection of the peritoneum quickly follows.

In the next place, the symptoms of perforation vary according to the situation which the perforated bowel occupies in the abdominal cavity. The nearer it lies to the central part of the abdomen the more fulminating will be both the local and constitutional symptoms. Owing to its proximity to the central nerve structures in the abdominal cavity, the pain will be more sudden, extreme, and diffuse, so that it will give no indication as to the seat of the lesion. We meet with cases of appendicitis from time to time with symptoms of a similar character; in such cases the appendix extends far inwards into the umbilical region, and when it ruptures or becomes suddenly gangrenous there is sudden and virulent peritoneal infection. A similar condition may result from rupture of a septic gall-bladder. Any of these accidents will be rapidly followed by meteorism and spasm of the abdominal muscles. Shock will be extreme and sudden in development. Furthermore, owing to the great vascularity of the central portion of the peritoneal cavity, great facility is afforded for absorption, consequently toxæmia takes place with extreme rapidity. On the other hand, the nearer the perforated bowel lies to the periphery of the abdomen the more focal will be the attendant phenomena, and the more accurately can it be localized by subjective as well as objective symptoms. In such cases, the local and constitutional symptoms are both milder and more gradual in development.

Perforation may occur in any kind of case, even the mildest ambulatory one, but, in common with other accidents, it is much more frequent in the severe cases with active abdominal symptoms such as diarrhœa, meteorism and hæmorrhage—all symptoms of extensive and deep ulceration. *This greater liability to perforation in diarrhœa cases is* well shown in the Johns Hopkins Hospital service, in which the accident occurred in twenty out of one hundred and fifty-seven cases with diarrhœa—$12\frac{3}{4}$ per cent., as against ten in six hundred and seventy-one non-diarrhœa cases, $1\frac{3}{4}$ per cent. Our own experience is similar; in four