consist chiefly of bile and mucus. "Blood in any considerable quantity is at all times a rare constituent." Vomiting is more common in duodenal than gastric perforation, for in this latter condition the physiological act of vomiting is, of necessity, materially modified by the fact that even with but slight expulsive effort the gastric contents escape more easily downward through the perforation into the peritoneal cavity, than upward through the esophagus; whereas in perforation of the duodenum the stomach wall is intact, and the mechanism of vomiting, in consequence is undisturbed.

"Shock, with its associated symptoms, is certainly the exception in both gastric and duodenal perforations. . . . It is essential to emphasize this fact, for the opposite view, frequently held by different authors, leads to erróneous diagnosis and to dangerous, if not fatal delay in operation. For similar reasons it is well, in this connection, to emphasize the fact that shock, when present, is no contraindication to immediate operation."

The objective symptoms embrace changes in character of respiration, (being mostly thoracic), the presence of tenderness, and muscular resistance, together with dullness in either the left or right flank. Of these, muscular resistance is regarded by Dr. Eliot as the most constant and most valuable objective symptom, and in its point of maximum intensity the most reliable guide to the site of the lesion.

Diagnosis.—The condition with which it is most frequently confused is acute appendicitis. In gastro-duodenal perforation the onset of pain is more sudden, while its location is more definitely epigastric. In the early hours after the onset of either lesion the diagnosis should be easily made by the difference in the physical signs; while in perforation the tenderness and rigidity are most marked above the level of the navel to the right (duodenal or pyloric) or to the left of the median line (cardia), according to its location, in acute appendicitis the tenderness and rigidity are most marked in the right lower quadrant. In perforation the duliness is elicited in either the right or left loin, while in appendicitis it is more tardy in its appearance, and is located at first between the anterior superior spine and the umbilicus.

"The lesions in the upper right quadrant for which acute perforation may be mistaken, include those of the gall-bladder, the pancreas, and the appendix.

. . . . Severe acute cholecystitis, especially of the gangrenous type, with or without perforation, may simulate acute perforation at or near the pylorus, so closely as to render differential diagnosis well nigh impossible. . . . In perforation the pain