

10 being under 30. The average time after the onset of the disease in the 8 cases in which this is recorded was 22 days, while the average stay in the hospital before perforation occurred was 13 days. Of the fatal cases, the average length of time the patient lived after the operation was three days, one case living eleven days. Between the sudden pain, which we may assume marks the occurrence of perforation, and the operation, the average time was thirteen hours, although seven were operated on within six hours, two of these successfully. The other successful case was not operated upon until 27 hours after the first symptom.

The type of disease may be classified as moderately severe in the majority of cases, although in at least three cases no grave symptoms could be noted previous to the perforation. In three cases hemorrhages had occurred; distension was present in five cases; delirium in two.

In only one case could any indiscretion in diet be found as a possible cause. In this particular instance the patient was at about the end of the third week of the disease, which was of that type characterized by a severe toxemia. He had been kept on sterile water during his stay of eleven days in the hospital, when a friend smuggled him in an orange, and this addition to his dietary was soon succeeded by profuse and repeated hemorrhages, and finally perforation.

Of the symptoms which are usually described as accompanying this condition, only one was uniformly present, viz., pain in the abdomen. In every case the onset of the pain was sudden, and in almost every case so severe as to cause the patient to cry out. A few hours after the onset the severity of the pain was frequently considerably diminished, so that one examining the patient then might have hesitated in making a definite diagnosis. Tenderness and rigidity were usually present before perforation, but in six cases no rigidity could be detected for from 30 minutes to several hours after onset of pain. In only two cases was vomiting a symptom. Liver dullness was absent in one case only.

In the majority of cases a slight increase in the rapidity of the pulse rate followed the onset of pain within a very short time, and progressed if operation was delayed. There were, however, some notable exceptions to this rule. In one case the pulse rate decreased from 92 to 78, and remained practically stationary for about 24 hours, when it commenced to rise, and soon reached 128. The decrease in the pulse rate, together with the subsidence of the pain, delayed the diagnosis, and hence also the operation. With the increase in the pulse rate, a definite diagnosis of perforation was made, and at the operation an exceptionally large perforation was