

ribs to allow of this being done. A drain was put down to the opening in the liver anteriorly, and surrounded by strips of gauze, shutting off the peritoneal cavity. The wound anteriorly was closed with the exception of about half an inch, through which the gauze passed. He was under the anesthetic between thirty-five and forty minutes, and, considering his weak state, stood the operation very well. His pulse was 150 at the finish. Interstitial hot salt solution was given under each breast, about a pint, and hypodermics of strychnine were freely used.

Dr. Rogers says that the collapse following was most marked, and during the night an interstitial saline was given, strychnia and brandy hypodermically and oxygen administered, and eight ounces of hot salt solution was given by bowel every two hours. His temperature was $95\frac{1}{4}$, and his pulse 160. At times his pulse was quite imperceptible, and even when felt it was so rapid as to prevent its being counted. The following day the temperature rose to normal, and the pulse came down to 110-120. After this the temperature never rose above 100, and kept between normal and $99\frac{1}{2}$, until he left the Sanatorium, on January 7th, for home, the opening behind being completely closed. His pulse remained somewhat quick, however, varying from 80 to 110. After returning home he gradually and rapidly gained strength, and resumed his practice on February 15th.

I wish now to express my admiration and appreciation for the exceptional skill and ability shown by Dr. Rogers in his treatment and management of the case. He deserves all the credit for the diagnosis of the perforation, and his prompt action undoubtedly saved a valuable and useful life.

The perforation occurred on the fourteenth day after the real onset of the disease, as indicated by the chill, with the temperature running up to 103. I think it is generally stated that the most frequent time for perforation to occur is during the third week, the second week following very closely upon this. Osler says that perforation occurs in the majority of cases in small, deep ulcers, and that there may be two or even three, and that the orifice is usually within the last foot of the ileum. In one case only was it distant eighteen inches. Peritonitis was present in almost every instance.

I am going to quote from an excellent paper by Dr. W. W. Keen, of Philadelphia, on "The Surgical Treatment of Perforation of the Bowel in Typhoid Fever," published in the *Philadelphia Medical Journal*, of November 4th, 1899.

In 1898, he collected 83 cases of operation, of which 67 died and 16 recovered, a recovery rate of 19.3 per cent. The first