PERFORATING GASTRIC ULCER; CIRCUMSCRIBED PERITONITIS; DEATH ON THE FIFTEENTH DAY.¹

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THE following case is reported for the purpose of illustrating the possible benefits to be derived from a laparotomy immediately after the perforating of a gastric ulcer, as well as at a later period in the course of the consequent peritonitis.

A female cook, forty-one years old, was admitted to the Massachusetts General Hospital at the time of the visit, and came under my care. She was evidently suffering intensely from abdominal pain. The abdomen was moderately swollen, tense and tympanitic, and there was a complete absence of hepatic dulness in front. There was slight, general tenderness, while there was no marked, localized sensitiveness. A rectal examination was negative, and the uterus was freely movable, not tender to the touch. The pulse was 70, of fair strength, and the temperature was 100° F. The respiration was 25.

It appeared, on inquiry, that eighteen hours before entering the hospital, she was suddenly seized with a severe pain in the left epigastric region. She was cooking a piece of steak at the time, and had eaten nothing during the afternoon excepting a bit of cheese. The pain soon became general, and she was seen by Dr. J. J. Minot, who was able to relieve her distress by means of two doses of morphia subcutaneously, in all less than a half grain. At this time the abdominal walls were flat and rigid. During the night a small quantity of yellow fluid was vomited. He saw her again in the morning, at which time the abdomen was swollen, the pain was persisting, and he advised her removal to the hospital.

The patient was questioned as to any previous symptoms which might be connected with this sudden seizure. She acknowledged that during the preceding month she had noticed occasional attacks of epigastric pain running into the back, unaffected by food, also eructations and water-brash. She had not thought herself sufficiently ill to seek for medical advice.

The sudden onset of an intense, epigastric pain, with symptoms of an incipient peritonitis and a disappearance of hepatic dulness, in a person apparently well, and with slight evidence of an antecedent gastric dyspepsia, suggested as the most probable explanation—a perforating gastric ulcer. The possibility of the occurrence of an acute pancreatitis was thought of, but the collapse usually associated with this condition was not present, and the development of the peritonitic symptoms was unusually rapid. My colleagues, Drs. Cutler and Porter agreed in this opinion, and an immediate laparotomy was advised. The patient refused permission, although appreciating the gravity of her situation and feeling that she was to die.

For a week nothing was taken into the mouth excepting bits of ice; nutrient, rectal enemata were given every six hours. She was kept free from pain by small doses of morphia, from a third to a half-grain daily. For several days during the second week she required no opium whatever.

On the fifth day intercostal tenderness in the splenic region was recognized. At this time three copious dejections took place, a large amount of gas escaped

by the rectum, and the abdomen became softer and less sensitive except in the epigastrium. The area of hepatic dulness was now apparent, though narrow, in the axillary region.

At the beginning of the second week some milk was taken by the mouth. The epigastrium became conspicuously swollen and tympanitic, neither excessively tender nor fluctuating, and eventually transmitted the aortic pulsations. During this period the question of a laparotomy was again presented, on two separate occasions, with a view to the drainage of the supposed peritoneal abscess, but the patient refused her consent.

During the last three days of life the strength rapidly failed, but the patient was comfortable, at times even happy, in an exalted delirium, and died on the fifteenth day.

The temperature was about 100° F. during the first week, and between 100° F. and 101° F. during the greater part of the second week. The pulse was in the vicinity of 100 until two days before death when it rapidly rose. The respiration was between 25 and 30 during the greater part of her illness.

On opening the abdomen, the space between the suspensory ligament and spleen, the diaphragm and the left lobe of the liver was shut off from the rest of the peritoneal cavity by fibrinous adhesions. It contained some two pints of thin, opaque, yellow fluid, and a considerable quantity of gas, forming the tumor observed during life. The peritoneum enclosing this space was covered with a moderately firm, fibrinous membrane. Elsewhere the peritoneum was normal in appearance, with the exception of a few delicate adhesions between the omentum and the abdominal wall. The stomach was contracted, and contained but little fluid. Its anterior wall, near the smaller curvature, was adherent to the lower surface of the left lobe of the liver, near the anterior edge. The adhesions were fibrous. At the inner surface of the stomach, corresponding to the adherent portion, was a sharply defined ulcer, not as large as the little finger-nail, of elliptical shape, the edges somewhat puckered. This ulcer was in the anterior wall near the lesser curvature, and midway along its course. After separating the adherent stomach from the liver a minute perforation was found in the base of the ulcer.

It is evident from the anatomical appearances, the early hour at which a laparotomy was advised, and the strength of the patient at the time, that a favorable result was likely to have followed the immediate operation.

Unfortunately in most cases of perforating gastric ulcer an operation for relief is likely to be merely exploratory, or attended with such difficulties as to prove of no avail and to greatly shorten life. Hence in any given case it cannot be fairly urged with any considerable degree of hopefulness. The possibility of meeting with the conditions as above stated should offer a greater degree of encouragement than would be possible without such an experience.

There can be no question that the drainage of the circumscribed, peritoneal cavity would have been of the greatest advantage to the patient, and would have been likely to have considerably prolonged life. It is by no means certain that it may not have been followed by a complete cure of the ulcer. The patient's opposition to the late operation was quite as strong as to the immediate laparotomy.

¹ Read at the meeting of the Surgical Section of the Suffolk District Medical Society, November 5, 1890.