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Perforating Gastric Ulcer; Posterior Gastro-Enterostomy; Fowler's Position :: :: ::

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PERFORATING GASTRIC ULCER; POSTERIOR GASTRO-ENTEROSTOMY; FOWLER'S POSITION.

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MEDICAL HISTORY OF THE CASE AND REMARKS BY DR. MUSSER.

I have reported with Dr. Wharton a case that was in many respects similar to this. In that case operation was done within ten hours after perforation, which accident fortunately took place while the patient was fasting, an incident corresponding to the course of the second case. In the second case the operation was done five and one-half hours after perforation. The first patient had not had solid food for twenty hours, and only a small amount of coffee eight hours before perforation. The second patient had been without solid food, and had taken only albumin water for from forty-eight to sixty hours. No opportunity to make a gastric analysis was given in the first instance, although it is presumed hyperchlorhydria was present, an extreme state of which was found in the second. Doubtless this excess of acid, unneutralized, contributed to the perforation. Accordingly, it may be well to emphasize the importance of neutralizing the acid by appropriate remedies in cases of gastric ulcer, when food that takes up the acid is not permitted. Without doubt the early operations at the time when the stomachs were empty, were important factors in saving the lives of the patients.

Another point of great interest was one of dissimilarity, but the contrast teaches an important lesson. The first patient was a muscular farmer. Rigidity of the abdominal muscles was extreme. In the second case there was great atrophy of the abdominal walls, and

in consequence there was no spasm or rigidity. Hence, given the lesions likely to cause spasm under other circumstances, it will be absent with abdominal walls of the character to be described.

I should like to add that the first patient is in excellent health, no gastric symptoms having returned.

I had seen Mrs. M. during November, at the request of her husband, a physician. She was 70 years of age, and had enjoyed excellent health until one year ago. She had been treated at that time by Dr. Boardman Reed for ulcer of the stomach, characterized by pain and hemorrhage. When seen by me she was suffering from pain, the occasional vomiting of large amounts of fluid, the daily regurgitation of a small amount. The pain was spasmodic, referred to the pylorus and relieved by regurgitation. It was not increased by food, except when the stomach was overfull.

On physical examination, the stomach, overdistended, could be well made out, and visible peristalsis was present. The pain often was coincident with the termination of a wave of peristalsis, at the region of the pylorus.

I concluded that the patient had pyloric obstruction due to spasm. No tumor could be made out. A soft tube passed into the stomach resulted in the withdrawal of two quarts of dark, grumous, offensive material. Afterward there was a perfect relief, and for almost three weeks she was without pain or distress. A test meal (Ewald) revealed total acidity 65, free HCl 40, absence of lactic acid, presence of sarcinæ and large bacilli. The odor was butyric. Lavage was done most carefully only twice, because of the possible ulcer. It seemed that an ulcer had healed causing constriction at the pylorus, or that an active ulcer was attended by pyloric spasm. The small vomitings were due to the regurgitation—the incontinence of retention. November 17 the patient washed out her stomach herself. November 19 sudden profuse hemorrhage occurred; at least a quart was vomited, followed by collapse. Rectal feedings, sips of water and egg albumin were resorted to.

November 26, at 9:30 a. m., she was seized with sudden pain in the median line or to the right, between the xiphoid and the navel, followed by shock. I saw her within half an hour. There was pain, vomiting of mucus, but no blood, rapid pulse, tenderness, no spasm,

cool extremities. She lay on the left side chiefly. The pain was considerable in the back and right shoulder. Liver dullness was present. A perforation had doubtless taken place, and an operation was advised.

Dr. Keen saw the patient at 12 m. Dr. Reed, her former attendant, joined us. Reaction had set in. Temperature, 99; pulse, 85. The patient complained of great pain and favored the left lateral dorsal position. Drs. Keen and Reed concurred in the diagnosis of perforation, and urged with me immediate operation. Dr. Keen operated at 3 p. m., five and a half hours after perforation had taken place.

SURGICAL HISTORY AND REMARKS BY DR. KEEN.

I first saw Mrs. M., a woman a little past 70 years of age, in consultation with Dr. J. H. Musser and Dr. Boardman Reed, Nov. 26, 1903, at noon. I had known the patient for a number of years. I had not seen her for three or four years and was struck with her loss of weight and emaciation. After an examination, I fully concurred in the diagnosis of perforated gastric ulcer, and three hours later the operation was done.

An incision was made to the left of the middle line on account of extensive diastasis of the recti muscles following her single pregnancy about forty-eight years ago. Only a very few muscular fibers were seen. The muscles were not only widely separated, but greatly atrophied. The entire abdominal wall was not over 1 cm. in thickness. As soon as the abdomen was opened, a little turbid, rather dark colored fluid poured out, and when the stomach was drawn out, a few flakes of lymph were found on it. In a moment the perforation was discovered. It was an aperture slightly oval, very sharply punched out, 5 mm. in its long diameter, situated precisely in the middle of the pylorus anteriorly. The whole pylorus was thickened, but not nodulated. Evidently it had been the seat of an old ulcer involving all the anterior wall. The ulcer was immediately closed by a continuous Lembert suture. The abdominal cavity was then flushed out with a large quantity of salt solution, care being taken to wash out between the diaphragm and the liver, and also down into Douglas' cul-de-sac, where a considerable amount of turbid fluid was found. The diaphragm was but little injected. The transverse colon was then turned up,

a hole torn through the mesocolon, and a posterior gastro-enterostomy done by means of a Murphy button. The peritoneal cavity was then again most carefully flushed out till the fluid, as in the first instance, returned clear. A number of adhesions were found between the coils of the intestine and the anterior abdominal wall and the omentum and the abdominal wall in the lower half of the abdomen, but I did not think it wise to prolong the operation by interfering with them. She was placed in bed in Fowler's position (i. e., with head of the bed raised).

She made an uninterrupted recovery, her highest temperature being 100.4 F. On December 1, five days after the operation, her temperature reached normal. In consequence of the thinness of her abdominal wall, I kept her in bed for four weeks. She went home December 31, wearing a belt and able to walk about without trouble.

The recovery from so serious a lesion as a perforating gastric ulcer and so serious an operation as abdominal section and gastro-enterostomy in a woman past 70, is a sufficient reason, it would seem, for recording such a case. Her recovery was due, I have no question, largely, first, to the promptness with which Dr. Musser acted; and, secondly, to the fact that her stomach contained little beside albuminized water. Yet, in spite of this favorable condition of the stomach, there were a few flakes of lymph already present on the stomach. A culture was taken from the abdominal cavity as soon as it was opened, and this proved, after eight days, to be sterile. I do not know that Fowler's position influenced the recovery in this case very much, in view of the facts just stated, but it certainly, at least, did no harm.

I debated for a few moments whether I should do Finney's gastroduodenostomy by means of a horse-shoe-shaped incision extending from the duodenum into the stomach. I, however, finally decided against it on account of the great thickening of the whole anterior pylorus, and because I believed it would take longer than a gastro-enterostomy by the Murphy button. For the last reason also I decided against a gastro-enterostomy with simple suture.

Up to the present time, over two months after the operation, the button has not passed, but it has not produced any trouble.