C A S E
OF
RUPTURE OF THE STOMACH

PRODUCED BY VOMITING;

WITH SOME OBSERVATIONS,

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THE following case of rupture of the stomach, accompanied with some unusual circumstances, having lately fallen under my observation, I have thought it may not be unworthy of the attention of this Society.

George Andover, æt. 34, had been liable for about two years to paroxysms of pain in the stomach. The pain usually continued for several hours, and generally went off with vomiting, and it returned at uncertain intervals, frequently of many weeks. Between the attacks the patient enjoyed tolerably good health. About Christmas last he vomited a large quantity of blood, which

rendered him so feeble, that he was confined to his bed for five weeks. Since that time, his health has been much impaired, and the attacks of pain followed by vomiting have been more frequent.

On the evening of April 13th, he was brought to St. Bartholomew's Hospital, where I first saw him. He was then suffering great pain, extending from the epigastric region over the whole abdomen, and accompanied by nausea; there was neither tenderness nor tension of the abdomen,—the pulse was frequent, tongue clean. He had shortly before his admission drunk some shrub and water, to which he in great measure attributed these symptoms, and told me he had had a similar attack a week ago, after indulging in spirituous liquors, and that it went off with vomiting. On the following day the pain had subsided, there had been no vomiting, but he complained of nausea; the abdomen was distended by flatus, and he had frequent eructations,—the pulse was weak, tongue natural.

At eleven o'clock, p. m. he had a sudden attack of most severe pain. I was called to him about an hour afterwards, and found him groaning with agony at the pit of the stomach,—the abdominal muscles were hard and contracted,—the belly was neither painful nor tender on pressure,—his pulse was small and feeble,—he was extremely restless, and his countenance expressive of the greatest suffering. I instantly gave him sixty drops of

tincture of opium, and as he found no relief they were repeated, but without benefit. He continued to suffer most acute pain for about two hours, when he was suddenly seized with violent vomiting. After this the pain somewhat abated; there was no return of vomiting,—but he sunk rapidly, and died at four o'clock in the morning.

Examination.—On opening the abdomen, the stomach was observed to be flaccid and empty, and its contents, which consisted of a large quantity of dark-brown fluid, were effused into the peritoneal cavity, through a ragged opening situated on its anterior surface, and near the œsophageal orifice. The rupture extended from below the lesser arch of the stomach to near its cardiac extremity, and was about four inches in length. The three membranes were not torn equally, the rupture of the peritoneal extending an inch farther than that of the muscular or mucous coat. On the posterior surface of the stomach was a laceration, measuring three inches in length; and there were two or three small ones, from an inch to an inch and a half in length, at its great arch. These lacerations extended only through the peritoneal coat of the stomach, the muscular and mucous tunics remaining perfectly whole. The mucous membrane of the stomach was lined with a great deal of dark-coloured secretion, beneath which the membrane itself was of a deep red colour throughout,—its texture was softened and partially em-

physematous. The stomach in other respects appeared healthy,—the liver was pale and softened,—the gall-bladder contained a calculus,—the structure of the spleen was unusually soft,—the other viscera were healthy.

In the eighth volume of the Society's Transactions, Dr. Crampton and Mr. Travers have described some cases of rupture of the stomach ; in all these cases there had been ulceration of the coats of the stomach at the part which had given way.

Dr. Abercrombie, in an interesting paper in the Edinburgh Medical and Surgical Journal, 1824, has published some cases of this kind. Many of these cases differed in their previous history, but presented similar symptoms in the fatal attack. In some there had been occasional vomiting, gradual wasting and other symptoms indicating serious disease of the stomach ; but in others the symptoms were slight and obscure, and the health was not obviously impaired. The fatal symptoms commenced with a sudden attack of most violent pain, referred to the epigastric region, and extending over the abdomen ; sometimes, though not invariably, accompanied by vomiting. The abdomen was in some cases hard and contracted, in others distended and tender. The pain continued unabated, with rapid sinking of the vital powers, and death took place in a few hours.

The stomach was found penetrated by ulcerations of various extent, articles of food and drink were found in the abdomen, and in some cases peritoneal inflammation had supervened. The stomach generally presented marks of long standing disease, as induration and thickening of its coats, adhesion to the neighbouring parts, and organic disease at the part which had given way.

The most remarkable feature in the preceding case, is the extensive rupture of the stomach, with so little disease of its coats; and in this respect it forms a striking difference to those cases hitherto related. The stomach presented no thickening nor ulceration at the part which was ruptured; the disease was confined to its mucous tunic, and appeared to be recent inflammation and softening of its texture. It may also be remarked, that the symptoms in this case were not such as generally indicate the existence of organic disease; there were considerable intermissions of the symptoms, the patient had enjoyed tolerably good health, and there was no emaciation.

In the lacerations of the peritoneal coat of the stomach, without including the other tunics, this case forms a striking resemblance to some appearances which the uterus presented, in a case of sudden death during parturition, described by Mr. C. M. Clarke, in the third volume of the Transactions of a Society for the Improvement of

Medical and Chirurgical Knowledge. "In the fold of the peritoneum, which dips down into the pelvis between the uterus and the rectum, I observed about an ounce of blood; and upon that part of the peritoneum which covers the posterior surface of the uterus, there were between forty and fifty transverse lacerations, none of which were in depth above one-twentieth of an inch, and many were merely fissures in the membrane itself. They varied much in length, some measuring one inch, some two inches, whilst the length of others did not exceed the fourth part of an inch. The space upon which they were situated, extended from one side of the uterus to the other, and occupied the greater part of its whole posterior surface. The edges of these lacerations were thinly covered with flakes of coagulated blood, and there could be no doubt that the blood found in the fold of the peritoneum, had escaped from the lacerations. The muscular part of the uterus was perfectly whole."

The only case I have met with of rupture of the coats of the stomach produced by an act of vomiting, or rather, attempting to vomit, is recorded by Lallemand, and is described in the forty-ninth volume of the *Dictionnaire des Sciences Médicales*, Art. Rupture.

The patient had laboured under difficult digestion for five or six months, and had been much

relieved by observing a strict regimen. After indulging her appetite to a greater extent than usual, she was attacked with uneasy feelings in the stomach, accompanied by nausea and inclination to vomit. She made violent but ineffectual efforts to discharge the contents of the stomach, and whilst suffering great agony, experienced intense pain, with a sense of tearing at the lower part of the belly; she uttered several screams, and fell down insensible. She sunk rapidly, and died in the night. On dissection, the cavity of the peritoneum was found full of half-digested food; the anterior and middle part of the stomach was torn obliquely from its small towards its great curvature, to the extent of five inches. The edges of the rupture were thin, irregular, and presented no marks of disease. The three coats of the stomach were not torn to an equal extent, nor exactly in the same direction; the rupture of the peritoneal was larger than the muscular coat, and the mucous membrane was the least extensively lacerated. A mass of scirrhous, an inch and a half in extent, surrounded the pylorus. The other parts of the stomach were perfectly healthy.