CASE
OF
HERNIA VENTRICULI,
FROM
EXTERNAL VIOLENCE,
WHEREIN THE DIAPHRAGM WAS LACERATED WITHOUT
FRACTURE OF THE RIBS.
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SURGEON.

COMMUNICATED BY
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Read May 23, 1815.

THE abdominal viscera have been occasionally found protruded into the cavity of the chest. The apertures by which they have passed, have arisen either from original malformation of the diaphragm, or from laceration of that muscle.

In the Medical Observations and Enquiries, an account is given by Dr. Macauley, of a malformation of the left part of the diaphragm, which permitted the passage of a part of the abdominal viscera into the cavity of the chest. In the Medical Records and Researches a similar case is related, in which the hernia had become strangulated, and occasion-

ed the death of a young woman aged 28 years; and in the same work, a case is given by Mr. Bowles, Surgeon, of Bristol, of a hernia through the right portion of the diaphragm, in a man who died at 50 years of age, of excessive vomiting, after the administration of an emetic. This hernia was contained in a sac of peritoneum and pleura, which had covered the deficient part of the diaphragm.

Hernia through the diaphragm occasioned by a laceration of that muscle, has occurred from fractures of the ribs. A case of this kind has been dissected by Mr. Travers, at Guy's Hospital: the ribs had been broken in the right side, and the intestines had escaped into the cavity of the chest, where they became strangulated and occasioned the death of the patient.

But no case of protrusion of the abdominal viscera into the chest has occurred within my knowledge, in which a laceration of the diaphragm has arisen from pressure of the abdominal viscera, as happened in the case I shall now proceed to detail, and I have to regret my inability to give the circumstances more minutely, having had some difficulty in obtaining possession of the few facts I have here endeavoured to relate.

Gerard Grout, a native of Lubeck, aged 27, a strong robust man, seaman on board of one of his Majesty's ships, was received into Plymouth Hos-

pital, the 25th of October, 1814, on account of a gun-shot wound in his face; and discharged from thence, cured, and invalided on the 17th of November following.

On his way to London the coach broke down at a place called Hunter's Lodge, about three o'clock in the morning of the 20th inst. and he being an outside passenger, was projected to some distance, and fell with considerable force. He did not however appear to be materially hurt, nor did he complain either at the time of the accident, or at any subsequent part of the journey. It is to be observed, he was intoxicated at the time he sustained the fall; about noon he proceeded on his way to town; and with one or two other persons who had been hurt, rode as inside passengers; but he seldom spoke, and never complained of pain, nor did he appear to the other passengers to suffer much in the course of his journey. On his arrival in London, which was in the evening of the 21st inst. he first complained of sickness, and said he was very ill; and soon after was conveyed in a hackney-coach, together with a black sailor also much hurt, to St. Thomas's Hospital, and walked from the coach to the dresser's room without assistance. Mr. Edward Tothill, dresser for the week, an intelligent young man, informed me that he complained much of pain in his left side, sickness, and shortness of breathing. His side was carefully examined, and his ribs not being fractured, or any

other bone broken, he was sent back to the inn ; his pulse being strong and full, sixteen ounces of blood were previously taken from his arm.

At 10 o'clock the following morning, I was desired to see him, and found him under great suffering. He complained of most severe pain in his left side, great difficulty of breathing, violent and continued vomiting, chiefly of blood. Pulse 120, small, tremulous, and irregular; countenance pallid; extremities cold; and temperature of the whole surface of the body below the natural standard.

By assistance he was raised in the bed, and upon desiring him to cough, he was unable; as the mere attempt to expand the chest gave him excruciating pain. I satisfied myself, however, the ribs were not fractured.

By the violent efforts of retching, the bandage had slipped off his arm in the course of the night; and a considerable quantity of blood had flowed from the orifice, about the room and bed-clothes: in addition to which he had vomited from two to three pints of bloody fluid. From these circumstances I entertained little doubt but that some internal viscus had given way from the fall, and that he was sinking from internal bleeding. I merely directed some aperient medicine, which his stomach rejected immediately; and a liniment for his side. He expired the same evening, about 11 o'clock, and the

following morning I obtained permission to examine the body.

Dissection.

On removing the parietes of the abdomen, the viscera were observed to be but little altered from their natural position, and contrary to my expectation, no blood was extravasated into its cavity. The pyloric extremity of the stomach was confined in an unusual way, and its coats somewhat inflamed. The other viscera were in a healthy state. On turning back the sternum, a considerable quantity of blood was found in the left cavity of the chest; which amounted by measure to three pints and two ounces. By introducing the hand, a substance appeared attached to the diaphragm, which gave the feeling of a torn portion of lung; but upon more minute inspection it was found to be a considerable part of the large curvature of the stomach, protruded through a fissure of the diaphragm, and filled with a sort of half coagulated blood. The lung of the same side was much smaller than natural, and occupied the upper and posterior part of the chest, and was strongly adherent in its whole surface: as was also the case with the right lung. These adhesions were evidently of long standing. Their substance did not appear to have suffered in any proportion with their membranous covering. The heart was of its natural size, and appeared perfectly healthy.

I was still unable to account from what vessel, or set of vessels, so large a quantity of blood had issued ; but upon removal of the whole from the body, a small semicircular aperture was observed at the lower part of the thoracic, or strangulated portion of the stomach ; through which the blood had slowly escaped into the cavity of the chest, and thus the very gradual increase of difficulty in breathing was accounted for, which a few hours previous to his death was so exceedingly distressing. I may further observe, that the fissure in the diaphragm was in the direction from below upwards about an inch in extent, and inclining towards the left side. The stricture was so complete, as with difficulty to allow the points of the little finger to pass. The lower or abdominal portion of the stomach was perfectly empty, as were the intestines generally.

The preparation is in the possession of Mr. Cooper. I have thus endeavoured faithfully to delineate the appearances, and may be allowed to make one or two observations in conclusion.

The apparently slight suffering of the man during the first twenty-four hours after the accident, seems extraordinary, when we consider the importance of the injured organs, and, that the period of approach of the symptoms of strangulation should have been so long delayed, is not less surprising ; particularly under the circumstances of travelling in a carriage

a distance of not less than 145 miles. At what time these symptoms began I cannot precisely state; but he first complained of pain on his arrival in London, and the vomiting of blood commenced about twelve or one o'clock of the morning previous to his dissolution.

Wood Street,

January 29, 1815.