and injected morphine hypodermically. Oxygen was also administered, and ether injected hypodermically. Gordon administered 30 grains of potassium bromide and 15 grains of chloral hydrate, but as this had no effect he then gave chloroform, which gave relief for a short time. Numerous authorities recommend gastric lavage, but this is a rather dangerous procedure, as passing the stomach tube, even a soft one, very often induces a severe attack of tetany. Others have advised the patient to take a large quantity of water, followed by an emetic, but I cannot find any case recorded in which this treatment has been successful. The only treatment up to the present that has given hopeful results is operation, but even this has not always prevented a recurrence of this grave disorder, as quite a number of cases have had attacks of tetany during the week following the operation. Rectal feeding for a week before the operation would, in my opinion, overcome this difficulty. The patient should have a dose of calomel and then a saline purgative every morning. Fifteen ounces of peptonized milk should be given by the rectum every six hours, and the bowel should be kept well cleansed by giving a saline or soap enema once every twelve or twenty-four hours, and about an hour before the rectal feed. Oral sepsis must be avoided by daily washing the mouth and cleansing the teeth and gums, and in order to prevent parotitis, at one time a serious complication in cases where rectal feeding has been necessary and food by the mouth had been prohibited, the patient should have a rubber teat to suck. By the above method the attacks become less frequent and less severe, and tend to disappear usually about the third or fourth day of treatment.

A CASE OF ACUTE DILATATION OF THE STOMACH OCCURRING IN THE COURSE OF AN OPERATION FOR DUODENAL ULCER.

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A. M., a miner, aged 47, for many years had symptoms pointing to the existence of a duodenal ulcer. At 9 p.m. on October 5th, 1913, the ulcer perforated whilst he was walking, some 200 yards away from his house, and he had difficulty in getting home. He did not vomit. He was sent to the Royal Infirmary, where I saw him at 4 a.m. on October 6th, that is, seven hours after the sudden attack.

There was no difficulty or doubt about the diagnosis, but three features of the case were noted as unusual.

1. The abdomen had not the extreme board-like rigidity generally present in such cases; indeed, for a case of ruptured ulcer, the abdomen was rather lax.

2. There was abdominal respiration and very little movement of the chest—in contrast to the usual fixity of the abdomen in such cases of recent peritonitis.

3. The pupils were widely dilated.

A hypodermic injection of morphine $\frac{1}{2}$ grain and atropine $\frac{1}{16}$ grain was given, and the patient operated upon without delay.

The abdomen was opened by a vertical incision through the middle of the right rectus muscle extending from the costal margin to a point an inch below the umbilicus. The diagnosis was confirmed, a chronic duodenal ulcer, with a perforation at its centre like the punch-hole in a tram ticket, being found about half an inch from the pylorus. There was lymph on all the adjacent peritoneum, but not a great quantity of extravasated fluid. The stomach was empty and small. The hole in the duodenum was closed with a catgut purse-string suture reinforced by a row of silk sutures.

The operation was simple and easy in every way but one. There was no occasion to use retractors to overcome rigidity of the abdominal wall, and gastro-enterostomy was not necessary. The only trouble arose from the difficulty in administering the anaesthetic satisfactorily. Anaesthesia was induced with chloroform (he appeared to be an alcoholic man, and he struggled a good deal), and it was kept up with ether, given by the open method, throughout the operation. The patient was all the time

a bad colour and the respiration was entirely abdominal, the chest movements being scarcely perceptible. Fortunately the patient was not stout, there was no distension of the abdomen, and there was very little muscular rigidity. I was therefore able to complete the operation in spite of the excessive abdominal movement. The pupils continued to be widely dilated. I sutured the abdominal wall with a first layer of continuous catgut, and had sewn up about two-thirds of the peritoneal wound when I noticed that the upper part of the abdomen was distending. In less than half a minute the stomach was bulging into the lower part of the wound and the distension increased so rapidly that the suture had to be unlaced. The stomach dilated more and more until it became drum-like and very tense. It appeared to be anchored at the pylorus and the cardiac extremities, because, as the distension increased, it rolled upwards, bringing the greater curvature forwards. The veins on the stomach became very prominent and enlarged. I did not see any distension of the duodenum, and the lower part of the abdomen did not increase in size. A stomach tube was passed by the mouth, and immediately there was a rush of gas through the tube, and the distension disappeared. The stomach then became firmly contracted and not greater in diameter than a piece of large intestine. The muscular contraction was extreme and there was no peristaltic wave. It contracted in sections, there being alternating white rings and intervening portions more naturally coloured. The venous engorgement of the stomach also disappeared entirely. At the same time the respiration became quiet and wholly thoracic, the complexion became pink, the pupils contracted, and the whole aspect of the patient changed. Less than five minutes elapsed between the beginning of the distension and recovery. The patient did well, and has not differed in his after-progress from other cases of ruptured duodenal ulcer.

The points which impressed me were:

- (a) Before the operation: (1) The abdominal respiration. (2) The dilated pupils.

- (b) During the operation: (1) The continuance of the dilatation of the pupils. (2) The increase of the abdominal respiration.

- (c) After the acute dilatation set in: (1) The rapidity of the distension. (2) The extreme venous engorgement of the stomach. (3) The quickness of the recovery. (4) The simultaneous disappearance of the abdominal respiratory movement, of the dilatation of the pupils, and of the engorgement of the veins.

Acute dilatation is the expression used when we speak of these cases, but acute distension would, perhaps, convey a more accurate impression of what takes place. It was obvious that there was great internal pressure, because the stomach was smooth on the surface and extremely hard, and the gas was forcibly ejected through the oesophageal tube. The manufacture of the gas took place in the stomach only, and the distension was as rapid as could have been produced by means of gas injected by a Higginson's syringe. The size of the veins indicated a very vascular mucous membrane and suggested increased secretion. The association of respiratory and vasomotor irregularity would point to an affection of the medullary nerve centres as being a possible cause.

UNDER the will of the late Mrs. Anne Sutton of Derby the Derbyshire Royal Infirmary and the Derbyshire Hospital for Sick Children receive bequests to the value of £3,000 and £500 respectively.

THE Roman Anthropological Society has decided to form an Italian Committee for the study of eugenics. The president is Professor Giuseppe Sergi and the members of the committee are Professors Corrado Gini, Giovanni Mingazzini, and Alfredo Niceforo; the secretary is Dr. Umberto Saffioti. The committee will study the factors that may determine the progress or decadence of races, in the physical as well as the physical aspect. To that end it will carry out researches on the normal or pathological inheritance of characteristics, on the influence of the environment and mode of life of the parents or their offspring, on the importance of the conditions of the organism during the act of reproduction, and on the influence of the mode of life or of the environment on the development of the new organism. The office of the Committee is in the premises of the Società Romana di Antropologia, Via del Collegio Romano, 26, Rome.