General nutrition had much improved and he was quite free from pain.

I am indebted to Mr. J. R. Lunn, medical superintendent, for permission to publish this case.

Note.—Since writing the above I have to report that the patient is now (February, 1910) able to walk without assistance, though with a somewhat spastic gait, and that he has full control over both sphincters.

† St. Marylebone Infirmary, W.

TWO CONSECUTIVE PERFORATIONS OF A PEPTIC JEJUNAL ULCER FOLLOWING GASTRO-JEJUNOSTOMY FOR A PERFORATED GASTRIC ULCER.

BY A. ERNEST MAYLARD, M.B., B.S. LOND.,
SURGEON TO THE VICTORIA INFIRMARY, GLASGOW.

IN a recent paper on Some Cases of Perforation of Stomach and Duodenal Ulcer¹ Mr. J. Grant Andrew recorded an exceptional instance of a triple consecutive perforation of gastric ulceration. The case occurred in my wards, and it can be considered little else than a remarkable coincidence that I am able to record a second instance of a similar character, though differing in this unique respect, that of the three perforations the last two were connected with jejunal ulceration. The history of the case was as follows:

A married woman, aged 51 years, was admitted to the Victoria Infirmary in February, 1907, suffering from a perforated gastric ulcer. At the operation a perforation was found on the anterior wall of the stomach near the pylorus. It was about half an inch long and a quarter of an inch wide with irregular edges, and seemed to be the centre of a large ulcer. The perforation was closed with Lembert sutures and a piece of omentum was also fixed over the lesion. An anterior gastro-jejunostomy was performed.

The patient remained well until October of the same year—i.e., about eight months after the operation—when she was seized with an attack of “indigestion.” This terminated in the course of three days in an acute crisis with symptoms of perforation. The abdomen was opened in the middle line. A little fluid escaped from the peritoneal cavity, and the parts presented the appearance of a fibrinous peritonitis. Numerous adhesions were encountered, and on separating these a perforation was found large enough to admit a No. 6 urethral catheter. It was situated on the anterior surface of the distal limb of the jejunum about $1\frac{1}{2}$ inches from the gastro-jejunal orifice. The perforation was closed by a purse-string suture, and over this an interrupted series of Lembert sutures. The parts were swabbed dry, and the parietal wound was completely closed.

The patient remained well until November, 1909—i.e., for two years after the second operation—when she again suffered from “indigestion,” and after an attack which lasted for a couple of days she was suddenly seized with acute abdominal pain and other symptoms suggestive of perforation. The abdomen was opened by a transverse incision midway between the umbilicus and xiphoid. The rectus muscle on each side was partially divided and the peritoneal cavity was opened. Numerous adhesions were found between the stomach, bowel, and anterior parietes. On turning up the omentum a small perforation was discovered in the efferent limb of the jejunum, about an inch or so below the site of the previous perforation. The perforation was about an eighth of an inch in diameter and close to the mesenteric attachment. It was easily closed by a purse-string suture, and for greater security a piece of omentum was stitched over it. From this (her third) operation she made a complete recovery, and left the institution about five weeks after with a medicine containing alkalies to be taken occasionally.

The last two perforations in the above case may be considered as coming under the head of strictly ulcerative lesions of the jejunum; that is to say, they were not of that class where the ulceration primarily commences at the line of anastomosis, and is, in one sense therefore, traumatic in origin. Both ulcers occurred at a short distance from

the gastro-jejunal line of union, and probably receive their pathological explanation from an initial lesion produced by the action of the acid gastric secretion with subsequent peptic digestion. The association of the ulcers with an anterior gastro-jejunostomy only goes to add another illustration to the many that have been recorded of this somewhat striking connexion. Reflecting upon the treatment adopted, I regret that neither the report of the operation nor my memory permits me to say why I did an anterior instead of a posterior gastro-jejunostomy. I do not think that altogether in about 200 cases of gastro-jejunostomy I have more than half a dozen times performed the anterior operation, and there has always been some special reason for selecting the less preferable method. The occurrence of a second ulcer independent of, and distant from, the first jejunal ulcer indicates that the same cause must have been at work as produced the first; and as this seemed likely to be the action of a hyperacid gastric juice greater precautions have been exercised in the way of prescribing alkalies to check excessive acidity and so prevent the attacks of “indigestion” which seem to have been the immediate precursors of the perforations.

Glasgow.

A CASE OF RUPTURE OF THE UTERUS TREATED BY SUTURE OF THE RENT PER VAGINAM AND DRAINAGE.¹

BY HERBERT J. PATERSON, M.B., B.C. CANTAB.,
F.R.C.S. ENG.,

ASSISTANT SURGEON TO THE LONDON TEMPERANCE HOSPITAL, ETC.

THE patient, a married woman, aged 25 years, had had three children previously, the last 18 months ago. After the birth of this child she was laid up in the infirmary for 14 weeks, and some operation for “womb trouble” (? curetting) was performed. There was nothing unusual in connexion with the two previous confinements.

The history of her recent confinement was as follows. The waters broke on August 11th, 1909. Dr. Mulloy saw the patient on the 13th. The cervix was slightly dilated, there were no labour pains, and the cord was prolapsed and pulseless, so nothing was done. Dr. Mulloy was called again at 10 P.M. on the night of the 14th. The patient was then having labour pains, but there was slight dilatation of the cervix, and the cord was prolapsed and pulseless. Under chloroform the cervix was slowly dilated until the knuckles of the open hand could be passed through the internal os. The right foot and hand presented with the pulseless cord between them. Delivery was effected without difficulty by traction on the foot, the back of the child being rotated towards the pubes, and flexion of the after-coming head secured by introducing a finger into the child's mouth. No instruments were used. The placenta was expressed with ease. On introducing the hand into the vagina it passed into the abdominal cavity. Dr. Mulloy realising the gravity of the patient's condition at once sent her up to the London Temperance Hospital.

The condition on admission (note by Dr. Russell Square) was as follows. There was some bleeding from the vagina and the patient was very collapsed, sunken round the eyes, and extremely restless. The extremities and the face were cold and damp with perspiration; the pulse was very small, soft, and uncountable. Some tenderness was present over the abdomen, increased by gentle pressure with the hand. There was some dulness in the flanks. When I saw the patient about 3 A.M. she was extremely collapsed, although somewhat better than on admission. The pulse was very feeble, the rate being about 140. The abdomen was somewhat distended and there was some dulness in the flanks. The vagina was full of blood-clot and a coil of intestine was felt protruding through a large rent in the vaginal vault.

Ether being given by the open method, a loop of large intestine (apparently sigmoid) was found to be prolapsed through an extensive rent in the posterior vaginal wall, through which the fist could be easily passed into the abdominal cavity. The left parametrium was involved in the tear, and there was free arterial hæmorrhage from two large vessels; these were

² THE LANCET, Oct. 30th, 1909, p. 1273.

¹ A communication made to the Gynecological and Obstetrical Section of the Royal Society of Medicine on Nov. 11th, 1903.

secured by ligature. The large intestine was pushed back into the abdominal cavity and a considerable quantity of blood was removed from Douglas's pouch. Further examination showed that the cervix was completely torn through, the tear extending upwards and involving the uterus for a distance of at least 4 inches, but as the uterus appeared to be firmly retracted no attempt was made to define accurately the upper limit of the tear. The torn edge of the cervix and lower part of the uterus were approximated by three stout catgut sutures. The torn edges of the peritoneum and vaginal wall were seized with forceps, and a purse-string suture was passed right round the tear, the suture being passed alternately through the vaginal wall and peritoneum. A large rubber tube was then inserted into Douglas's pouch, and the purse-string suture was passed tightly round it. The patient was much collapsed at the end of the operation, which lasted under half an hour, but gradually rallied. Continuous saline proctoclysis was maintained for 60 hours, and the patient made a good recovery, although her temperature varied between 99° and 101° F. for the first 12 days after admission. The tube was removed on the sixth day.

On Sept. 8th the patient was examined under ether. The uterus was not felt above the pelvic brim. The cervix was posterior in the pelvis, the texture was firm, and the canal was closed. The vagina was narrowed posteriorly. In the posterior fornix was a roughened area about one inch in diameter. Per speculum was seen a granulating area rather larger than a shilling-piece immediately behind the cervix. Bimanually the uterus was freely moveable. The sound passed, concavity backwards, four inches. Per rectum was felt a slight thickening on the posterior wall of the uterus extending more than half-way up towards the left cornu. The pelvis was not contracted.

So far as I am aware, the method of vaginal suture and drainage was not adopted in any of the recorded cases of ruptured uterus. It appears to me that those who advocate the treatment of this accident by hysterectomy lay too much stress on the difficulty of controlling hæmorrhage. I think that Nature's ability to deal with internal hæmorrhage is often under-estimated. A perusal of the recorded cases leads one to think that in some instances recovery ensued, *not* because of, but in spite of, hysterectomy. To perform hysterectomy if suture be practicable seems to me an unsurgical procedure. As regards the case here recorded, I am strongly of the opinion that the patient was not in a fit condition for hysterectomy, and that this method of treatment would most probably have led to a fatal result.

Upper Wimpole-street, W.

Medical Societies.

ROYAL SOCIETY OF MEDICINE.

SURGICAL SECTION.

Cancer of the Pylorus.

A MEETING of this section was held on Feb. 8th, Mr. RICKMAN J. GODLEE, the President, being in the chair.

Mr. E. W. HEY GROVES read a paper on the Radical Operation for Cancer of the Pylorus, with special reference to the advantages of the two-stage operation and to the question of the removal of the associated lymphatics, illustrated by numerous lantern slides. He first gave a brief account of eight cases of his own in which he had performed excision. Of these eight cases six were done in two stages, first a gastro-enterostomy, and in about 10 days later partial gastrectomy. Of these only one died. The other two, in which the whole operation was performed at one sitting, died. The symptoms and diagnosis were discussed with especial reference to the scope of exploratory operations. In all doubtful cases no hesitation ought to be felt in advising exploratory laparotomy. But even when exposed to sight and touch the stomach tumours are often impossible to differentiate. Cases were related in which benign swellings were excised under the impression that they were malignant. Other cases which were regarded as hopelessly malignant lived for many years after gastro-enterostomy to prove the mistaken diagnosis. Those facts were all strong arguments for the two-stage operation in which a piece of the

growth might be taken for histological examination before a radical excision was performed. The mortality results of large series of resection cases were reviewed in which it was shown that in over 1000 cases between 26 and 51 per cent. died. With these figures were compared 18 cases treated by the two-stage method with only three deaths. The high mortality was due to three chief causes—shock, peritonitis, and lung complications. Reasons were shown why the two-stage method went far towards avoiding all these dangers. It was pointed out that if the interval between the two stages was not longer than 14 days no difficulty was experienced from adhesions when excision was undertaken. The distribution of the lymphatics of the stomach was reviewed and especial stress laid upon the lymph vessels in the great omentum which loop downwards and then up over the colon to the glands above the pancreas. Pathological evidence was given of the actual spread of cancer of the stomach by way of the omentum to the organs in the pelvis. Therefore it was considered that every complete removal of cancer of the pylorus should include that of the great omentum. Details were given of a method of operation which carried this out, and it was contended that it was quite as easy to remove the omentum from the front of the transverse colon as to divide the omentum from the great gastric curve. Lastly, figures were given showing that the ultimate (three year) survival after excision of cancer of the pylorus was only about 7·6 per cent. of those submitted to operation and about 15 per cent. of those surviving the operation. It was suggested that these poor ultimate results might be due in part to the incomplete removal of the lymph area associated with the stomach.

Mr. HERBERT J. PATERSON said that the section was greatly indebted to Mr. Groves for coming up from Bristol to give them such an encyclopædic paper on the subject of resection of the stomach. In these days when surgery had reached such a degree of perfection that all moveable organs could if necessary be removed, irremovable ones stitched, and those which were not amenable to such treatment incised or partly resected, it required considerable ingenuity to suggest a new operative procedure, and Mr. Groves was to be congratulated on having brought forward such a procedure that evening. He thought that Mr. Groves had been unduly pessimistic as to the results of the one-stage operation, so far as the immediate mortality was concerned. For his Hunterian lectures he (Mr. Paterson) had ascertained the results of Kocher, the Mayos, and several other surgeons, and he found that the average mortality after operation was under 20 per cent. When he was in America in 1907 the Mayos told him that they had up to that time performed over 100 resections with a mortality of 14 per cent. Mr. Groves had given them a table showing the causes of death after resection of the stomach, and according to that table 79 per cent. of the deaths which occurred after operation were the result of peritonitis from leakage or other causes. With the improved surgical technique of the present day no self-respecting surgeon could dream of losing so many cases from leakage, or, if he did, he ought not to attempt resection of the stomach. As regards the operation in two stages, he did not think that the immediate mortality was as low as Mr. Groves maintained, because he (Mr. Paterson) knew of several published cases which had ended fatally, but which Mr. Groves had not included in his table. His own experience was that the adhesions which formed after the first operation added considerably to the difficulty of the second operation. Then, too, in some instances the manipulations incidental to the removal of the stomach at the second operation had been sufficient to separate the recently formed adhesions of the gastro-jejunostomy previously performed, so that at the second operation the whole procedure had had to be done over again. Some years back he had called attention to another objection to the operation in two stages—namely, the risk that the subsequent resection might disturb the relations of the previously effected anastomosis, and so lead to regurgitant vomiting. This had happened in the case which he had reported, but he was of opinion that it was a risk which might be guarded against. Yet notwithstanding these objections he had gradually come round to the opinion that on the whole the operation in two stages was to be preferred in many of the cases. In treating cancer of the stomach one was met with a very difficult problem, and one had to decide what was the best course, taking many circumstances into consideration. Therefore, he thought it better, except