discovered that the growth was inseparably attached to the pancreas, and a perforation of the posterior wall of the stomach took place quite easily during the separation of the two organs. On account of this unforeseen difficulty the operation had to be completed by occluding the duodenum and the performance of an anterior gastro-jejunostomy. The immediate progress of these two cases after a very long and tedious operation was very satisfactory. There was no vomiting, and the patients were allowed a cup of tea by mouth within a few hours of recovering from the anaesthetic.

I was very much impressed by the absence of vomiting in my cases of simple gastro-jejunostomy when properly performed—that is, when one implants the jejunum with the necessary curve upon the stomach to divert its contents to the distal portion of the jejunum. I use the expression “properly performed,” because my first case of gastro-jejunostomy for pyloric cancer was done without the knowledge of this important fact, and the patient, who survived the operation for two months, had frequent attacks of sudden and violent vomiting without any serious constitutional disturbances accompanying it. In my other cases vomiting has been conspicuous by its absence.

The following note of the case was kindly forwarded to me by Dr. Brogden:

History.—April 15th, 1901. L. L., aged 36, a tailor, has been in failing health for a considerable time, and has been treated by different medical men for chronic gastric catarrh; formerly weighed over 12 st.; has been steadily losing weight, occasionally as much as 4 or 5 lb. per week, now weighs 8 st. 3 lb. Tongue coated, bowels irregular. Complaints of great discomfort after taking food, and has copious sickness at intervals of two, three, or four days, bringing up a small bucketful at a time.

State on Examination.—I found his stomach greatly dilated, with all the usual signs well marked. On April 17th the vomited contents of the stomach were examined; they were frothy, fermenting, and contained large quantities of torulae and sarcinae, and fragments of food could be recognized, which had been taken several days before. On April 28th lavage was commenced with saline solution, and from that time on, by the daily personal use of the tube, the condition of the patient improved, and by careful dieting the loss of weight was arrested, and some slight improvement ensued in his appearance and weight. Coincident, however, with this improvement, a hard mass, tender on slight pressure, could be gradually made out in the region of the pylorus. At the end of another fortnight I found improvement had not been maintained, the weekly loss of weight again reaching 5 or 6 lb., and on May 16th I called in Dr. Paterson, who confirmed my opinion of the existence of a growth, probably malignant, and the necessity of its removal.

He was admitted into the infirmary on May 18th, 1901, and discharged July 10th.

Operation.—May 31st. The anaesthetic was administered by Dr. W. G. Williams, and I was assisted at the operation by Mr. Cornelius Griffiths, the patient's body lying on a hot-water bag, and other precautions being taken against collapse. After inspection of the tumour, which involved the neighbourhood of the pylorus, I decided it was advisable to remove it. The large vessels of the greater and lesser omenta were clamped by pairs of forceps, and divided between them to the extent of stomach decided upon for removal. Two pairs of powerful clamps were placed at each extremity of the tumour, and the duodenum and the stomach were divided between them. On examination I found that the growth had under-run the mucous membrane of the cardiac side of the stomach, and had to take off another inch of the stomach before getting a healthy surface. The ends of the stomach and duodenum were then cauterized and closed by apposition sutures beyond the clamps. The ends of the divided stomach and duodenum were closed by a continuous suture, which was afterwards inverted, and the ends closed by Lembert's suture. The ends of the stomach and duodenum could not be approached within about 2 in., and the operation was completed by performing an anterior gastro-jejunostomy about 18 in. from the duodeno-jejunal fold by means of needle and silk. The abdominal wound was closed in tiers. Nutrient and stimulating enemata were used occasionally during the operation. The progress of the patient after the operation was satisfactory and the sutures were removed on June 17th. The method I adopted in my two cases is that of Professor Kocher, published this year (1902).

Examination of Tumour.—Dr. Mitchell Stevens, pathologist and assistant physician to the Cardiff Infirmary, reported as follows: The excised part includes nearly equal lengths of the pyloric end of the stomach and of the duodenum. It measures 7 in. on its convex border and 4½ on its concave border. The peritoneal surface is natural. The part of the stomach removed measures 2 in. on its lower and anterior aspect, and 3½ in. above and behind. Its wall is everywhere thickened, and this thickening increases on approaching the pylorus, where it amounts to about ½ in. On the inner surface of the stomach is seen a greyish-white, hard, infiltrating, finely lobular growth, involving the mucous and submucous coats of the stomach, the latter coat being especially affected. On pressure, the growth emits a thick, white, sticky juice. The pylorus is greatly contracted, its diameter being about ½ in., and the contraction is still more marked at a distance of 1 in. from the opening into the stomach. On cutting open the lumen of the specimen, the whole of its wall is seen to be hard and thickened, measuring over ½ in. in thickness, and cutting like a piece of gristle, and the same nodular kind of growth is seen projecting from its inner surface. This growth being continuous with that previously mentioned, and extending distally from the pyloric orifice for a distance of 2 in., and only partially surrounding the contracted lumen. On looking at the cut surface, the striking feature is the great thickening of the submucous coat, which is tough and white, and contrasts markedly

with the muscular coat over it, in which the bundles of muscle fibres are prominent, though infiltrated at their bases by the white submucous overgrowth. Microscopically the character of the growth is that of a slowly-growing, scirrhous, spheroidal-celled carcinoma, whose origin appears to be from the deep cells of the pyloric glands.

After-History.—Dr. Paterson and I showed the patient on September 27th, 1901, at the clinical meeting of the South Wales Branch of the British Medical Association, and his condition from that date up to the present time has been very satisfactory, according to a report which I received on March 10th, 1902, from Dr. Brogden, in which he says that “L. L. was with me yesterday and appears in good health. He has been regularly weighed once a month since the operation, and his average weight has been 10 st. 4 lb. He tells me that he has suffered no inconvenience from indigestion or otherwise with the exception of having to be careful in the matter of diet: cold Christmas pudding was one too many for him. He feeds and feels as well as ever he did. Since the commencement of this year he has been able to work regularly and continuously at his trade.”

RECENT OPERATIONS ON STOMACH, GALL BLADDER, AND BILE DUCTS, AND FOR EXTRAUTERINE PREGNANCY.*

By J. SCOTT RIDDELL, C.M., M.B., M.A.,
Surgeon and Lecturer on Clinical Surgery, Aberdeen Royal Infirmary.

To the practitioner of the pre-Listerian era probably nothing in the whole range of modern surgery would appear more wonderful than the success which attends operations for the anastomosis of hollow viscera, and the relief so brought to patients previously beyond the reach of operative help. The subject has grown very rapidly within the last fifteen years, and the early and then surprising results of Senn have been eclipsed by those of operators who have had at their disposal many ingenious improvements in the technique of the operation, in the shape of bone plates, bone bobbins, metal buttons, elastic ligature, and new methods of bowel suture. Such operations, once rare, are now commonplace.

Of 5 cases of gastro-enterostomy, or gastro-jejunostomy, done within the last nine months, 3 were for malignant disease of the pyloric end of the stomach, 1 for inflammatory tumour, and 1 for gastric ulceration in that region. Operation was undertaken to relieve the patient of the distressing symptoms of pyloric obstruction, and as a possible preliminary to removal of the obstructing tumour. In the first case the jejunum was united to the front wall of the stomach, while in the other four the “posterior” method was selected, the bowel being fixed through a vertical hole torn in the transverse mesocolon to the posterior wall of the stomach. Owing to the disadvantages attending the use of Senn's bone plates, Murphy's button, and direct suture, Mayo Robson's bobbin was employed in all the cases. Its advantages from ease of application and efficiency are in my opinion very great. The bobbin was fixed by a running suture of silk in the openings, and the stomach and bowel then united by a covering continuous fine silk thread. The edges of the wound in the mesocolon were stitched to the stomach wall and the abdomen closed. The advantages of the “posterior” method are considerable. It allows dependent and therefore easy passage of the stomach contents into the bowel; post-operative sickness is practically absent, and the patient complains of very little discomfort. On the other hand, if the anterior method be chosen, sickness is said to be pretty constant, and it becomes necessary, as in my first case, to wash out the stomach.

The mortality of the operation was, according to Billroth, in the early years about 50 per cent., but it has steadily declined till at the present day it may be taken that in benign cases it is about 10 per cent., while in malignant disease, from the wretched condition of the patient before operation, it rises to close on 30 per cent. The average duration of life in malignant cases is from a few months to a year or more. My experience of Robson's bobbin is so satisfactory—all the patients having recovered—that I should have no hesitation in recommending the operation either as a preliminary to pylorotomy or partial gastrectomy, or as a palliative procedure in cases where the growth is too large to be removed or the condition of the patient too low to permit of a radical operation. For gastric ulceration with considerable haematemesis, as in the fourth case, by resting the stomach, gastro-

* Read before the Aberdeen, Banff, and Kincardine Branch of the British Medical Association.

enterostomy brings immediate relief, and leads to a steady and very noticeable improvement in the general condition of the sufferer.

CASE I.—Mrs. C., aged 54, was transferred to my ward by Dr. Gordon in May of last year.

History.—She had suffered from indigestion for fifteen years; ten years ago she began to vomit occasionally, and for the last five years has vomited at least once a day. Since last November she has kept almost to bed and has vomited after almost every meal.

State on Examination.—She complained of a constant feeling of fullness over the stomach region, and of eructations after eating. Eating was regularly followed by pains an hour to an hour and a-half afterwards, and very often by vomiting, which relieved the pain. She had lost a great deal of flesh. The vomit showed distinct blood reaction, as did the stools sometimes. Free HCl was present. On inspection a distinct bulging was seen just below the left costal margin, and reaching down to the level of the umbilicus. This tumour was soft on palpation, and tympanitic, and pressure produced gurgling of gas apparently passing towards the right. The bulging showed a constriction, a narrower part passing across the middle line. Peristaltic action could be seen over this bulging. The stomach was frequently washed out, which eased the patient.

Operation and After-Progress.—On June 7th gastro-enterostomy was performed, and a large cancerous mass was found on the lesser curvature of the stomach towards the pylorus. The anterior method was used, and as the patient had a good deal of sickness after the operation, the stomach was emptied and washed out on the second day, and thereafter occasionally during the first fortnight. She made a good recovery, and before she went home was able to take a fair amount of food without any discomfort. Dr. Dalgarno, who attended her at home, reports that she had a period of comparative comfort till October, when he was called in as pain had returned, and that she gradually sank and died in the beginning of November, the operation thus giving relief for about five months, and prolonging life for six.

CASE II.—J. G., aged 70, came to me complaining of symptoms which pointed to dilatation of the stomach.

History.—He had suffered off and on from dyspepsia for two or three years. This had been worse at times, and he had been vomiting. The vomit was offensive, and had once contained blood. He was always worse after taking beef or potatoes, but he could take porridge, tapioca pudding, chicken, rabbit, and fish. He used to vomit every two days. He had little or no pain about the stomach, but he had lost 3 st. within the last three months, and felt his strength going down. His medical attendant (Dr. Fergusson, Banff) had felt a tumour in the pyloric region.

State on Examination.—His stomach was much dilated, and could hold 7½ to 8 pints of water. Washing out gave much relief, and he improved by this treatment. Tests for malignant disease were negative, free HCl being present, and no lactic acid to be discovered and no blood in the vomit, but plenty of sarcinae. He was allowed to go home to continue lavage there. This he did, and returned in August for operation.

Operation and After-Progress.—The operation was performed on August 26th. He never had a bad symptom after operation; indeed, felt so well that in the absence of the nurse he got out of bed and went to the lavatory the second night after the operation. Before leaving hospital he was taking solid food freely, and his subjective symptoms were entirely gone. Now, six months after the operation, Dr. Fergusson reports that the tumour is much larger, but that he has had very little pain till quite recently, when he has required 20 drops of nupentha at night. He is now confined to bed. About seven or eight weeks after he left hospital Dr. Fergusson had to operate on him for strangulated femoral hernia. "He stood it well, hardly losing a meal." Dr. Fergusson writes: "The stuff he vomited before I operated was exactly like what a person with bad diarrhoea would pass. I suppose the pylorus being out of circuit had made it come more easily." The tumour here was also a large carcinoma, removal of which was impossible in the condition of the patient.

CASE III.—Mrs. B., aged 44, was sent by Dr. Adam, Elgin, in May, 1901. About three years ago she felt pain in the region of the stomach, which has since been intermittent, and relieved sometimes by taking food. About two months ago she felt a small, hard, movable, and tender swelling in the region of the pylorus. Both the swelling and pain have considerably increased. A sausage-shaped tumour of hard consistence can be palpated lying on the greater curvature of the stomach towards the left side. Laparotomy was done with a view to removal of the tumour if easy, but the patient refused before taking the anaesthetic to have the operation continued if the removal caused much risk. She also declined a palliative operation by gastro-enterostomy. As the tumour was large and removal inadvisable without the latter operation, the growth, a large malignant one, was not interfered with. She went home three weeks afterwards, but returned in November with the tumour much enlarged and the symptoms of gastric carcinoma and pyloric obstruction much aggravated. Posterior gastro-jejunostomy was done, and the patient left hospital much relieved three weeks after operation.

CASE IV.—Mr. H., aged 37, was sent to me early in December, 1901, to have gastro-enterostomy performed.

History.—In the autumn of 1899 he had suffered from dyspepsia characterized by pain over the stomach, which came on usually a couple of hours after eating. This was accompanied by sickness and retching. He improved under dieting and medical treatment until April, 1900, when he had severe haematemesis twice on one day. His stools were dark for a good while afterwards. He was in bed for three weeks then and was dieted. He had never been quite well since, though he regained strength. He consulted his doctor again in November, 1900, for a feeling of distension after eating. He improved a little, but in February, 1901, was troubled with pain in the left side and sometimes with acute pain in the back and between the shoulders. Occasionally he has had a jaundiced appearance. He hung on through last spring and summer and laid up to see what a rest would do, but had again a severe attack of haematemesis lasting for three days. This left him very weak, but though he pulled up a little he is now at a standstill, complaining of pain over the stomach, especially on taking any solid food, which he has been attempting to do once a day. During the last year he has lost 3 st. in weight.

State on Examination.—Patient looked anaemic, wasted, and a bad sub-

ject for operation. The salol test showed decreased motor power of the stomach. Ultzmann's potassium iodide test gave a reaction in the saliva in twenty-four minutes instead of in seven to eleven minutes. Boas's test breakfast showed free HCl and no lactic acid.

Operation and Progress.—Posterior gastro-jejunostomy was performed on December 5th, an indurated crater-shaped swelling being palpated on the posterior wall of the stomach near the pylorus. The patient, though very weak, made an excellent recovery as far as the abdominal operation was concerned but developed a small parotid abscess a week after his operation, which was not quite healed when he left the Nursing Home a month afterwards. He was able after ten days to take food freely without pain, and before he left was on ordinary diet and feeling much stronger. His medical attendant reported two months ago that the patient had improved very much. He was occasionally troubled with flatulence but looked better than he has done for years. He left for the south of France for a holiday, and I had a letter recently in which he says that the improvement in his general condition continues.

CASE V.—Miss D. was seen with Dr. Cowie, Turfiff, in August of last year and was operated on in the Northern Nursing Home for suppurating appendicitis. The cause of the trouble was a sloughing appendix which lay behind the caecum pointing upwards towards the umbilicus and containing a concretion round a small piece of bone. The patient made an uninterrupted recovery, but on going home had a good deal of discomfort, vomiting, flatulence, etc., which necessitated medical treatment. In spite of this, vomiting and discomfort continued, and she came back to Aberdeen in the beginning of this year, when I found symptoms of pyloric obstruction, vomiting, pain, flatulent distension, fermentation of the stomach contents, diminution of the motor power of the stomach, sarcinae in the vomit, etc. Free HCl was present and no lactic acid. Eventually a tumour was made out in the pyloric region, and as her condition was steadily deteriorating in spite of rest, special dieting, lavage of stomach, etc., operation was advised. A pyloric tumour, probably inflammatory in origin was found, and posterior gastro-jejunostomy was done. Pain and distension at once disappeared, the patient was up and taking full diet in a fortnight, and now, a month after operation, she is in better condition than she was before her attack of appendicitis. The benefit of the operation in this case was very marked and immediate.

CASE VI. *Partial Gastrectomy.*—Mrs. B. (Case No. III. of gastro-jejunostomy) came back with a view to having the stomach growth removed. This was done fifteen days ago, a considerable portion of the stomach close up to the gastro-enterostomy opening, along with the pylorus, part of the duodenum and a chain of enlarged glands in the gastro-colic omentum, being removed. The stomach and bowel ends were closed by a firm catgut suture passing through all the coats, and covered over by a Lembert suture of fine silk. The patient's condition became somewhat alarming towards the end of the operation, and as has been our routine practice in such instances recently, two pints of normal saline solution were injected into the median cephalic vein. The result in this as in all the other cases in which I have employed it was very striking, the patient's pulse when she left the table being better than before operation. The patient had nutrient enemata for four days, but is now on a liberal diet and has no discomfort.

CASE VII. *Gastrotomy.*—Mr. A., aged about 50, a patient of Professor Finlay, suffering from stricture of the oesophagus, close to the cardiac end of the stomach, was operated on three weeks ago. The stricture has been gradually progressive for five years and for two days before operating there had been complete obstruction. Franck's method was chosen, and the stomach opened and a tube inserted at once. The patient was fed within a few hours of the operation. His condition has improved considerably. He had not the slightest discomfort after the operation.

CHOLECYSTENTEROSTOMIES.

The junction of the gall bladder with the duodenum or jejunum is an operation that is sometimes called for in cases of obstructive jaundice where a gall stone is firmly impacted in the common duct, high up, and cannot be removed, such operation being resorted to *in extremis*, while it is the procedure of choice in cases of stricture of the bile duct, of which I describe 3 cases. In the first case the small Murphy button was used, but in the second I preferred to employ Mayo Robson's small bobbin. In these cases the patient was so deeply jaundiced that one feared the possibility of haemorrhage from the want of coagulability of the blood from the presence of bile acids in it. This experience I had in my third case in a case of gall bladder drainage for occlusion of the common duct by a carcinoma of the pancreas which, with some enlarged glands, was pressing on it. In the 2 cases of cholecystenterostomy no difficulty of this kind was met with. Calcium chloride, which is vaunted in such cases, was given in 15-gr. doses three times a day.

CASE I.—C. T., aged 50, was seen with Dr. Gordon. He had been suffering from jaundice for some time, and from the course of the illness and the fact that a distended gall bladder could be palpated it was diagnosed as obstructive jaundice, and operation decided on. The history did not point to gall-stone impaction, and it was thought to be more likely a case of stricture of the bile duct, either simple or from the pressure of a tumour outside the duct, though such could not be made out. Accordingly he was admitted to my ward on August 15th, 1901, and cholecystotomy performed on August 20th. The drainage of the gall bladder much relieved the patient, and the jaundice faded, but he had the ordinary flatulent distension, constipation, and discomfort consequent on the want of bile in the intestine. Ox bile was given, but did not help him much. An astonishing amount of bile drained from his gall bladder each day. Cholecystenterostomy was advised, but was not carried out for various reasons till November 4th, that is nearly three months after the first operation. He was then so weak that it was undertaken as a last resort, and I regret to say the operation, though easily carried out with

Murphy's button, did not save him. An examination of the liver and bile ducts was made by Professor Hamilton and Dr. Duncan, and a well-marked stricture of the common bile duct close to the duodenum was found. I regret now that cholecystenterostomy was not done in the first place instead of merely draining the gall bladder, as probably the satisfactory result in my second case was due to the junction being made at once.

CASE II.—J. M., aged 58, was sent to me by Dr. Dalgarno suffering from obstructive jaundice for which there was no explanation unless that of occlusion of the duct by tumour or otherwise. A tumour in the gall bladder region could be made out under an anaesthetic. He was operated on in January of this year. The gall bladder was exposed and was found much distended. It was aspirated on its lower side, and a large quantity of bile mixed with pus was removed. A loop of jejunum close to its duodenal end was then located by the usual landmarks, and was occluded by catgut ligatures passed through the mesentery. The small bone bobbin was then introduced through a small incision in the gall bladder and intestine, and fixed there by running sutures of silk. A covering suture of fine silk was then passed continuously round so as to bring peritoneum so peritoneum neatly over the bobbin, and the abdomen after toilet was closed. The patient made an excellent recovery, the icteric tint gradually faded, and he was able to take food freely. He left hospital twenty-four days after operation. No trace of the bone bobbin has been found in any of the cases.

CASE III.—J. S., aged 54, was seen with Dr. McKerron. He had been suffering for some months from jaundice, which had recently been complicated with ascites. As the liver itself did not seem to be the cause of the trouble, malignant disease involving the bile duct was diagnosed as a cause, and, as the patient's condition was otherwise evidently hopeless, the possibility of improvement from cholecystotomy or cholecystenterostomy was pointed out to him, and the risks attending the same. He elected to have an operation performed. The abdomen was opened and the ascitic fluid removed. A large distended gall bladder was found, the liver being normal. As the patient's condition became alarming, saline infusion was used with benefit, and cholecystotomy was rapidly performed, the gall bladder being drained. The patient's condition was very satisfactory during the afternoon, but in the evening severe haemorrhage took place from the wound (in spite of a fortnight's preparation with calcium chloride). Dr. Murray, my house-surgeon, gave strychnine and a saline infusion, but the patient gradually sank and died during the night. An examination showed the bile duct strictured by a malignant growth of the pancreas.

CASE IV. *Choledochotomy*.—Miss M., aged 42, was sent to me by Dr. Mitchell, Old Aberdeen, with the following history. Four years ago she had an attack of hepatic colic, which continued for three days. She had similar attacks at intervals of three months, but without jaundice. Three years ago she was admitted to a medical ward in the infirmary, and while there she had an attack with jaundice. The attacks became very much more frequent, the pain increased, and the jaundice was well marked. Dr. Mitchell advised operation, and she came to me on March 7th of this year. After a fortnight's watching and preparation, coeliotomy was performed, and the gall bladder was separated from surrounding structures to which it was adherent. The common duct was found much dilated, and was incised, in order to remove from it and the hepatic duct a number of cholesterolin gall stones of considerable size. The duct was sutured, and a drainage tube was inserted down to the wound in the duct, and sterile gauze packing placed round it. The tube was removed on the third day, and the gauze packing changed on the fourth. Bile discharged from the drainage opening for a week, but the patient left hospital in an excellent condition three weeks after operation with a small superficial granulating wound where the drainage was effected.

Operations for Extrauterine Pregnancy.

CASE I.—Mrs. L., aged 29, was sent to me in May last by Dr. Middleton Connon, Montrose.

History.—She had been married ten years and had had four children, the youngest being 3 years old. She had a bad recovery from her last confinement, but got quite well again until, towards the end of January last, at 6 o'clock one morning she was seized with sharp shooting pain "like a knife" in the lower part of the abdomen and groins of both sides. This was accompanied by sickness and vomiting. Heat by poultice and rest eased her, but she had a sharp recurrence four or five days later, again with sickness and vomiting. A week later she had a third attack in the early morning, the most severe attack of all. (These attacks coincide with the first month of the pregnancy, and point to localized peritonitis.) After this she had two or three bad terms, but they began to diminish in severity and frequency. She had not menstruated since the last week of December. About the beginning of March—that is, third month of pregnancy—she noticed a small round thing, hard, about the size of a marble, on the right side of the abdomen, low down, and this swelling gradually increased in size till it is now as high as the umbilicus. This swelling sometimes pained her at night, and much more so the last two or three weeks.

State on Examination.—Prominent veins on chest at the upper part over the sternum; areolae round nipples. In the abdomen a large swelling, inclining to the right side, could be felt as high up as the umbilicus, while a smaller one, which apparently contracted on palpation, could be made out to the left of the large swelling; the latter is evidently the uterus enlarged to the size of a two months' pregnancy. Patient thinks she is five months' pregnant. There has been no menstrual discharge or decidual membrane thrown off. No fetal heart sounds could be made out in the larger tumour, and ballotement was absent.

Diagnosis.—The diagnosis lay between a right intraligamentary ovarian cyst with a two months' pregnancy, or an extrauterine foetation on right side, with the uterus enlarged to the size of a two months' pregnancy. The latter seemed the more likely.

Operation.—The patient was operated on on May 24th, 1901. On opening the abdomen the uterus was found of the size and in the position described above. The right and larger tumour was then aspirated at a soft and fluctuating part, but blood clot blocked the cannula. The aspiration opening was then dilated with a Pean's forceps, and a considerable quantity of old and fresh blood clot removed. The sac passing down

between the layers of the broad ligament was then opened, and a fair quantity of liquor amnii escaped. Adherent omentum had previously been separated from the uterus and right broad ligament, and the parts were very vascular and bled freely. After the escape of liquor amnii a fetus of about five months' size was seized by the legs, which presented and removed. The cord was cut short near the fetus. Haemorrhage from the interior of the cavity was very free, and was stopped by gauze packing. The sides of the sac were sutured to the parietal peritoneum, and iodoform gauze was tightly packed in to stop bleeding. The placenta was left untouched. Any attempt to remove the sac and placenta would, I am sure, have proved fatal on the table. Gauze packing in the vagina still further compressed the tumour and prevented bleeding.

Progress.—The patient was dismissed on the fifty-sixth day after operation, there being still a small sinus. Though there was occasional bleeding from the cavity during the gradual separation of the placenta, the temperature was all along an aseptic one, due to the great care and attention of my house-surgeon, Dr. A. L. Bisset.

It may be said, Why not have waited for a couple of months, so as to try to save the child, but I think the dictum of Werth is quite decisive that on account of the great danger to the life of the mother during the early months of an extrauterine pregnancy, the tumour should be treated much as a malignant growth would be. The expectant plan of treatment gave 36.9 per cent. recoveries out of 265 cases, while operation saved 76.7 per cent. of 515 cases. The mortality of cases not operated on is about 68.8 per cent. Harris prepared a table showing the improvement in results under modern operative methods. In the period 1809 to 1889, 9 cases recovered out of 37 operated on (about 22½ per cent.), while from 1889 to 1899, 27 cases recovered out of 40—or 67½ per cent.

CASES II and III.—I have had two other successful cases where tumours which, I take it, were tubal moles, were removed from the broad ligaments. One of these had been in position for about eight years, and had caused the patient much suffering, and produced a chronic state of invalidism from menorrhagia. In the other, laminated clot was found in the tube.

CASE IV.—I have at present convalescent in my wards a case sent by Dr. Cran, Banchoy.

History.—Mrs. M., aged 26, has been married six years, and has had no family. Seven weeks before admission, at the time of her period, she noticed that it was not the same as usual. The discharge was thin and watery, and bright red in colour. This discharge lasted right up to her admission. It did not change in any way at the time corresponding to her next period. Five weeks before admission, while patient was going about her usual household duties, she was suddenly seized with down-bearing pain in the lower part of the abdomen. The pain was intermittent for three days, and on the fourth day she was obliged to keep to bed, where she remained for three weeks. She then got up, but the pain returned most markedly in the right iliac region. On admission she was in great pain, like that of a "false labour," and a large tumour could be made out in the abdomen nearly up to the umbilicus, and with the uterus lying to the front and left side of it.

From such a history the case seemed to me to be undoubtedly one of extrauterine foetation between the layers of the broad ligament and with a large extravasation of blood. In any such case, or in inflammatory pelvic conditions where vaginal drainage is indicated, I find it desirable to inspect the tumour from above through a laparotomy wound, as the exact conditions can be more readily determined, and a hand above in the pelvic cavity often assists one wonderfully in securing proper and efficient drainage from below. In this case this plan was followed, and a large quantity of old and recent blood clot was removed. No ovum was found. The large cavity was washed out with sterile salt solution and packed with iodoform gauze, which was changed after a week. The patient was quite relieved by operation, and except for a slight febrile attack, probably due to influenza, a fortnight after her operation had made a perfect recovery.

REPORTS OF SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Professor T. R. FRASER, President, in the Chair.

Wednesday, June 4th, 1902.

HAEMORRHAGE INTO THE SPINAL CORD IN A PREGNANT WOMAN.

DR. ALEXANDER BRUCE read notes of this case. The symptoms were sudden onset, with acute tearing pain in the mid-dorsal region, extending into the extremities; complete and permanently flaccid paralysis of the lower extremities, abdominal walls, bladder, and rectal sphincters; early abolition and subsequently slight return of deep reflexes; slight dorsiflexion of great toe on tickling the soles; rapid formation of