

the method I adopted which, though based on the operation described by Kraske, still differs materially in many points. After reading Kraske's description of his operation and, further, the case related by Dr. John C. Davie,<sup>1</sup> it struck me that the incisions there mentioned might hamper one in manipulation, especially if the growth should be higher up in the bowel than at first diagnosed. I therefore made some experiments on the cadaver and decided on the incision I have described, as giving greater space without involving the sacrifice of any important structure. Again basing my action on the same experiment, I divided the sacrum transversely; this enabled me to get a clear view of the cavity. I was much struck by the extremely close relationship between the rectum, bladder, and urethra, and felt that one of the main difficulties to be avoided was wounding either of the latter. This led me to have a silver catheter kept in the bladder throughout the operation. Though this is not mentioned in either of the accounts I have quoted, I am sure it is necessary to enable the operator to avoid calamity whilst stripping off the rectum from the front. I found it by no means easy to define—when aided only by the finger in the rectum—the proper height at which to divide the bowel. I therefore slit up the rectum; this gave me a full and complete view of the area of disease, without in any way adding to the hæmorrhage or fouling the wound. This—which to me was a great help—does not appear to have been thought necessary in the previously recorded cases. The remainder of the steps of the operation were conducted on the ordinary principles employed in dealing with large open cavities. The operation is still on its trial. It seems, so far as can be judged from the few instances recorded, to afford opportunity of dealing with the particular form of cancer at least as successfully as many other recognised operations. It is also superior to the ordinary proctectomy in that it allows of a wider removal. I am, however, sure that it can only safely be employed in those cases of rectal cancer which are seen and diagnosed at an early stage, and should never be undertaken unless the limits of the disease can be clearly defined, and when the bowel is felt to be freely movable. It does not seem to be likely that it will ever be practicable to restore the continuity of the rectum with the sphincter after extensive removal, as the attempt would involve great tension, too great to permit of rapid union. The opening made into the pelvis is large, but its very size, I think, enhances the safety of the operation, for it permits of all parts involved being fully in view, and enables the needful dissection to be undertaken with precision, and, further, all bleeding points are well under control. Again, thorough drainage can be secured with certainty. In a smaller wound these difficulties and dangers would be less easy to overcome. It is certain that, should the operation be further tried, many variations and improvements will be suggested. For the present I offer this single experience, and I have endeavoured to point out the difficulties as they occurred to me.

The accompanying sketches illustrate the lines of incision and the appearance of the wound in the various steps of the operation, together with the present condition of the parts.

Leeds.

## CONCEALED ANTE-PARTUM HÆMORRHAGE AND PLACENTAL APOPLEXY.<sup>2</sup>

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THIS paper is based upon observations made on the same patient in two successive pregnancies.

Mrs. A—, aged thirty-nine, mother of nine children, was daily expecting confinement; she is habitually sallow and anæmic, not strong, and liable to migraine. On August 16th, 1889, she was sitting quietly in her house sewing, when she suddenly at 4 P.M. became alarmingly faint. She had received no injury, and no shock physical or mental. There was no vaginal

hæmorrhage, nor had there been any during the pregnancy. I first saw her at 6.30 P.M. She was extremely faint, with very weak pulse, and was decidedly blanched. She was not unconscious, and was said to be much better than she had been when the symptoms commenced. The os uteri was just sufficiently dilated to admit the tip of the finger; the membranes were intact, and the head was presenting. Very slight labour pains were present, but there was no coloured discharge. The patient was obviously very ill, and the probability of the presence of intra-uterine hæmorrhage at once suggested itself, but still it was not impossible that some other cause might have occasioned syncope in such a patient, especially as total concealment of accidental hæmorrhage is most uncommon. At 7 P.M. the pains were coming feebly, and I decided to give some ergot and to rupture the membranes. The liquor amnii was almost perfectly clear, and there was still no hæmorrhage. The head now came well into the os. As there seemed no indication for active interference, and as the patient was no worse, I awaited the course of events. At 11 P.M. a dead male child was born by natural efforts after an easy second stage. Now the diagnosis was placed beyond doubt. There is a phenomenon sometimes described in obstetric reports as an "avalanche." Such an obstetric avalanche was now seen. The child was followed by a gush of blood-stained liquor amnii and by a huge quantity of dark blood-clot, which at once filled an ordinary wash-hand basin, and also by the placenta. Fortunately there was no further hæmorrhage after this, and the patient was not obviously worse for what had just happened.

Convalescence was tedious, the patient suffering much from headache and insomnia, but ultimately recovery was complete. The patient again became pregnant about September, 1891, and progressed satisfactorily up to Jan. 3rd, 1892. Then she had an attack of metrostaxis, which lasted for two days and then subsided, but was followed by a very slight show for several days. On Feb. 8th, 9th, and 10th she had a return of the metrostaxis, which again was followed by a very slight daily show. On Feb. 26th hæmorrhage occurred rather severely, this time accompanied by slight pain. She also became very faint. I saw her about 9 A.M., and found on examination that the cervix was slightly patulous, and that it was difficult to reach any presenting part through the long cervix, but that the head was there. I inserted a Barnes' hydrostatic dilator and administered ergot, and at noon she was delivered of a dead female six-months' fetus (not macerated). The placenta came in six or seven minutes, and there was no post-partum hæmorrhage. A small amount of clot accompanied the placenta. The mother made a good recovery.

*Description of the placenta.*—The placenta weighed seven ounces and a half. The foetal surface was not abnormal, but the maternal surface presented in its centre a soft fluctuating nodule as large as a good-sized walnut; on incision this was found to be occupied by a clot which could be enucleated easily. The clot was covered above by a layer of placental tissue, a quarter of an inch thick. Close to this there had been another hæmorrhage of about the same extent, but the clot had almost all escaped, and the smooth cavity which was left was torn open. There were several other smaller infarcts in different parts of the placenta, and at one spot the tissues were very soft and pale, as though an old infarct had broken down.

*Remarks.*—The patient presented, in the first place, an instance of concealed accidental hæmorrhage. Dr. Galabin says that at Guy's Hospital in 23,591 deliveries there were thirty-one cases of accidental hæmorrhage, and of these only one was concealed. Probably these figures under-estimate the frequency of the condition, but it certainly is exceedingly rare. Accidental hæmorrhage occasions some of the most dangerous conditions an accoucheur has to face. In 106 cases collected by Goodell 51 per cent. of mothers and 94 per cent. of children were lost. The present case was not an extreme one, the blood forming a localised clot and not bursting into the amniotic sac. In the last pregnancy we see an example of the occurrence of metrostaxis during pregnancy, a phenomenon which is not so very uncommon, and concerning which I have already made a communication to the Leeds and West Riding Medico-Chirurgical Society. In this instance we are able to demonstrate a cause for its occurrence. Hæmorrhage took place at more than one date into the placental structure, and probably also upon the uterine surface of the placenta. The first hæmorrhages did not interrupt the pregnancy; the

<sup>1</sup> Brit. Med. Jour., Feb. 13th, 1892.

<sup>2</sup> A paper read at the Leeds and West Riding Medico-Chirurgical Society, Feb. 5th, 1892.

latest one would have done so, I believe, even without artificial dilatation of the cervix. The placenta as shown to the above Society is a very interesting and typical specimen of placental apoplexy. There was no history of syphilis or tubercle in this case. On microscopic examination a section through the placenta at the edge of the infarct showed some disease of the vessels, but no decided fatty change.

Leeds.

## GASTRO-JEJUNOSTOMY FOR PYLORIC CANCER; RECOVERY.

By F. A. PURCELL, M.D., M.CH.,  
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F. M.—, aged forty-four, married and the mother of two children, was admitted into the Cancer Hospital on March 3rd, 1892. The patient, a spare woman, weighing (nude) 5 st. 13½ lb., is suffering from cancer of the pylorus and stomach wall. She complains of pain in the stomach and the right hypochondrium; vomiting (no blood) comes on about two hours after taking food; bowels irregular, habitually constipated, motions dark, with debris of blood; heart has a reduplication of first sound; lungs sound; urine alkaline, contains no albumen. A distinct tumour is to be felt over the pylorus, nodulated and movable, extending from the right to across the middle line of the umbilicus. The stomach is enlarged; a succussion splash is distinctly produced. The nature of the disease was explained to the patient. The gradual wasting, constant vomiting, and little or no faeces passed, confirmed the serious outlook of gradual starvation and exhaustion, caused by disease occluding the outlet of the stomach. After a consultation at which the condition was confirmed by my colleagues, it was decided to explore the pylorus and, if feasible, to perform pylorotomy, and gastro jejunosomy by means of Senn's decalcified bone plates. The patient gave her ready consent to the resection of the pylorus. Preliminary to operation, on March 11th, the stomach was commenced being daily washed out by means of a long soft rubber syphon tube, passed into the stomach by raising the tube (with a funnel at top) and pouring the fluid in; then lowering the end below the bed, syphon action, the fluid was all drawn off, together with any debris of food and mucus; a quart of warm water was first used, then a quart of a 2 per cent. solution of salicylate of soda, finishing with a quart of warm water to thoroughly get rid of the salicylate of soda. The passing of the tube and the washing out process gave no distress, unpleasantness, or discomfort to the patient. Nutrient enemata were administered per rectum night and morning; peptonised milk and essence of beef only were given by the mouth. This was continued for nine days. On March 18th, the day prior to operation, the stomach was not washed out, owing to a feeling of weakness and faintness; that night the bowels were cleared out by a soap-and-water injection. At 10 P.M. she partook of five ounces of peptonised milk.—March 19th: Day of operating. Nothing given by the mouth. At 7 A.M. a beef-tea enema was administered, and at 2 P.M., just prior to being placed on the table, an ounce of beef-tea and an ounce of brandy were administered per rectum. Full preparations were made for resection of the pylorus, and for the gastro-jejunosomy two of Senn's decalcified bone plates were threaded with four long threads, the two end ones of Chinese silk, the two lateral of chromicised catgut; fine intestinal needles threaded with fine chromicised catgut for suturing the peritoneal surfaces together. A hot-water bed was placed on the operating table for the patient to lie on to keep her warm. She was anaesthetised with chloroform by Dr. Bourns. I arranged with him, so soon as I had completed the incision in the abdominal wall and had thoroughly explored the diseased pylorus, that he should ease the patient out of the chloroform, supplying enough to simply control her. This Dr. Bourns satisfactorily carried out. Time occupied, fifty minutes; amount of chloroform used, six drachms; no sickness. I was assisted by my colleague, Mr. F. B. Jessett. A four-inch incision was made in the middle line from the umbilicus towards the ensiform cartilage. The stomach presented itself in a much enlarged condition, and the free border on the right was implicated with disease for

about four inches, extending into the pylorus and encircling the duodenum down to and fixing it to the spine below. Disease on the stomach wall was the movable tumour felt on examination. It was self-evident that the disease was too extensive to attempt resection of the pylorus. This, then, was abandoned. Gastro-jejunosomy was proceeded with. The jejunum was sought for and found deep down above the border of the left kidney and brought outside the abdominal wound. Its course towards the duodenum was travelled along until a part which came in easy apposition with the front wall of the stomach was selected to attach to the stomach. A piece about four inches was included between two round rubber elastic ligatures. These ligatures were lightly tied with one knot and clamped with torsion forceps to prevent slipping. The anterior wall of the stomach was drawn out and warm sponges packed around; a vertical fold was pinched up with the fingers, avoiding bloodvessels; a three-quarter inch incision was made with scissors through the entire coats; the mucous membrane that protruded was pared off, and a few bleeding points were secured and tied. One of the bone plates was then inserted through the opening. The lateral threads of chromicised catgut armed with needles were passed through the entire coats from within outwards, about one-eighth of an inch from the edge of the wound. The end threads of silk were brought out at the ends of the opening, and not passed through the walls of the gut; the several threads were held so as not to cross or get mixed.

The portion of jejunum already isolated was now taken; its internal aspect was pinched up into a transverse fold and cut across longitudinally three-quarters of an inch to correspond with the opening in the stomach; the mucous coat protruding was pared off, any bleeding vessel being tied; the second bone plate was passed in, and the several threads treated as above described. The threads were now drawn taut, and my assistant adapted the plates in apposition, the fingers of both hands encircling fixed them; the bottom gut ligatures were now tied firmly, but not too much squeezed; the tying was done by drawing the threads longitudinally down between the surfaces; the corresponding end threads of silk were tied; and, lastly, the upper lateral ones of gut; ends of all were cut short. My assistant still keeping hold of the plates, I passed some six quilt<sup>1</sup> sutures around the upper border and ends, securing the peritoneal coats of the stomach and bowel together; the under border was not touched. The round rubber ligatures were released from the bowel. The toilet completed, sponging of the abdominal cavity was necessitated to get rid of some ascitic fluid; the channel seemed perfectly staunch. The abdominal wound was brought together with silk-worm gut ligatures, dressings, and flannel binder applied completed the operation, which lasted fifty minutes. Much time was wasted in exploring the pyloric disease. The patient was nice and warm, and came easily out of the chloroform, having consumed six drachms. I thank Dr. Bourns for the way he managed the anaesthetic, and also thank my colleague Mr. Jessett for his kind assistance and for the admirable way he held the bone plates when inserted, which is a most material point in the operation.

That night, on account of severe pain, a hypodermic injection of one-sixth of a grain of morphia was inserted in the arm, after which she slept for an hour and a half. She was given a teaspoonful of tepid water every half hour; no sickness; a few drops of brandy were added later on during the night; urine drawn (seven ounces).—20th: Two teaspoonfuls of peptonised milk with the same quantity of water and four minims of brandy were given every hour; little pain. Slept three hours; urine drawn (nineteen ounces). Brandy increased to one ounce.—24th: Progressed since last report; sleep extended from six to seven hours. Milk-and-water has been partaken of freely, and to-day she has had mutton broth. Plenty of urine passed, no sickness, and little pain.—25th: A soap-and-water enema relieved the bowels; diet increased by addition of eggs; brandy discontinued.—26th: Fish dinner, which she enjoyed. Bowels moved by simple enema; all sutures in abdominal incision were taken out. The wound looks well; the dressing had not been touched since first put on.—27th: Removed from special ward to the general ward. She soon made a move up to the couch, and began to partake of the usual meals, without any distress

<sup>1</sup> The quilt or square suture for intestinal work was introduced by Mr. Halstead of Baltimore, and is a great improvement on the Lembert suture.