A CASE OF SUCCESSFUL CÆSAREAN SECTION.

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CASES of successful Cæsarean section are in all countries comparatively rare, but in Ireland they have been up to the present almost unknown. Thus, I have been unable to find a record of any case where the operation was successfully performed on the living woman in this country. Nor do the records of the Rotunda Hospital during the 130 years of its existence contain one. The chief reason for this is undoubtedly that in Ireland cases of extreme pelvic deformity are very rare. I fear, also, that the fatal perfection to which constant practice had brought the operation of delivery by craniotomy and extraction, and the habit of mind it engendered of considering the child's life of no account, has naturally militated against the Cæsarean section. Finally, till the introduction in 1876 by Porro of the operation which is known by his name, the mortality of the Cæsarean section when performed in large cities or lying-in institutions was almost 100 per cent. Thus, for nearly one hundred years there had not been a successful case of the operation in Paris, though it had been performed many times by the most celebrated surgeons, and in Vienna, and Prague it had not been much more successful.

Hence, when Porro published his first successful case it attracted the attention of the whole profession, and from the success that followed the further trials of the operation, both in his hands and in those of other operators, it seemed as if the days of the old Cæsarean section were numbered. The explanation, too, of the success of Porro's operation was not difficult, for it evidently depended on the lessened danger of peritonitis, which usually followed

the Cæsarean section owing to infection of the peritoneum from the interior of the uterus. It seemed, however, also certain that infection of the peritoneum from the interior of the uterus would be impossible if any means could be devised to procure accurate union of the uterine wound. The chief difficulty was supposed to be caused by the constant alterations between contraction and relaxation of the uterine walls, and also the very quick reduction that takes place in the size of the organ after delivery. In order to overcome these difficulties Prof. Saenger, of Leipsic, introduced a new method of suturing the uterine walls. He first separated the peritoneum from the muscular layer for the distance of half an inch all round the wound, and then removed a wedge-shaped portion of uterine tissue, the base of which was formed by the portion from which the peritoneum had been elevated. He then united the muscular layer of the uterus by sutures which did not include the decidua, and then sewed the peritoneum carefully over the top. By this method, joined of course by the most scrupulous attention to antiseptics, such good results have been obtained that the Cæsarean section has again come into favour, and the operation of Porro is reserved for cases where some special conditions are present which contra-indicate the former operation, or at all events, make its success very doubtful. As successful cases of Cæsarean section accumulated it became more and more apparent that the success of the new method depended on the accurate apposition of the two uterine surfaces, and that the exact method by which this was obtained, or the material used for the sutures, was of little consequence.

CASE.—K. S., aged twenty, single, admitted into the Rotunda Hospital on July 9th, 1889, having been sent up from Dundalk by Dr. Kearney. She was last unwell on Oct. 19th, 1888, and should therefore be confined about July 26th. The following are the measurements of the patient taken on admission: Height, 110·4 cm., or 3 feet 7½ inches; Sp. Il., 23 cm.; Cr. Il., 23·3 cm.; C. D., 6·25 cm.; C.V. estimated at 4·5 cm. The girl was well nourished, and had all her wits about her, and although she was so small, and the child was evidently not below the average size, and its head

had not in the least entered the brim, there was not the slightest tendency to pendulous abdomen. My first idea was to perform a Porro, in favour of which were the following points:—1st. The exact time for the operation can be settled, and one has not to wait till labour has set in. 2nd. The operation is itself much easier than the Cæsarean section, the success of which greatly depends on accurate sewing of the uterine wound, and as I had never seen either of them performed I was inclined to choose the less complicated one. 3rd. It would, if successful, save the woman from any risk of a similar operation having again to be performed. On looking up the most recent authorities I found, however, that they were in favour of the Cæsarean section, and against the operation of Porro, except when there was a positive indication for the removal of the uterus present. These are chiefly—

1. When the uterus is the seat of any disease, such as myoma, which, if left behind, might soon require removal.

2. When the woman is suffering from any disease, such as osteomalacia, the cure of which might be seriously interfered with or even prevented by a subsequent pregnancy.

3. When the patient has already been so long in labour that it is probable that the discharge is beginning to decompose, or when she has been examined by persons who may easily have infected her, or where she shows evident signs of infection having taken place. As none of these conditions were present I determined to perform Cæsarean section.

The first thing was to settle which of the methods of operating I would adopt. The chief points about which there is question are—first, should the uterus be opened *in situ*, and the child extracted, and the uterus then brought out through the abdominal walls, and sutured. Or, should the incision in the abdominal walls be made sufficiently large to allow of the uterus being turned out of the peritoneal cavity while still containing the child, the child being extracted outside the abdomen.

A further disputed point is whether an elastic ligature should be placed round the neck of the uterus, and tightened before the uterus is incised, or is it better to trust to the uterine contraction alone to stop the bleeding. Perhaps the most important point of all was as to what method I should adopt for suturing the wound in the uterus, on the accurate apposition of which, if we exclude the question of antiseptics, the whole success of the operation may be said to depend.

The only advantage of extracting the child before you turn out the uterus is that the abdominal incision does not require to be so long. What settled the question in this case was that I had determined to use the elastic ligature to check the bleeding from the wound in the uterus, and this was only possible when the uterus was first brought outside the abdomen. What determined me to use the elastic ligature was that by it all bleeding is checked, and so there is no occasion to be in any hurry when passing the sutures through the uterus. This I consider the more important, as on the accuracy with which this is done the success of the operation mainly depends. As this was my first case, and I had never even seen the operation performed, I thought that this would more than counter-balance the supposed tendency the prolonged use of the elastic ligature has to cause inertia of the uterus and consequent *post-partum* hæmorrhage. The exact time the operation is performed is also important, the most favourable period being towards the end of the first stage of labour, when the os is nearly fully dilated and the membranes still unruptured. The reason for waiting so long is in order that the lochia may be able to drain away through the cervix during the puerperal state. On July 29th the girl had some pains, and as she was already some days beyond her time, I thought labour was coming on, and sent out notices for the operation next morning at ten o'clock. However, the pains went away in the night, and it was not until August 4th, at 10 a.m., that labour commenced.

At 8 30 a.m., on August 5th, the cervix was taken up; the os admitted one finger and the F.H. was good, so notices were sent round to as many as possible, that the operation would be performed at 10 30 o'clock. Before the operation, the vagina was carefully disinfected by Dr. Bagot with corrosive sub. solut. 1:5,000, and all the usual antiseptic precautions for cases of laparotomy were adopted.

The Operation.—The incision in the abdominal wall was carried from the umbilicus to within two inches of the pubes, but had to be extended upwards considerably before the uterus could be turned out of the abdomen. The wound in the abdominal wall above the neck of the uterus was then closed as far as possible with American forceps, as this seemed to me a much easier and quicker method than by passing provisional ligatures. A strong elastic ligature was now put twice round the cervix of the uterus, drawn tight, and then fastened with a large compression forceps. The uterine wall

was then freely incised in the middle line between the fundus and the cervix. As the placenta was found attached to the uterine wall right underneath the incision, the latter was continued downwards towards the cervix, and the membranes soon came into view. They were at once ruptured and the child extracted without difficulty, but though the time from the application of the elastic ligature to the extraction of the child could scarcely have been two minutes, the child was in a state of blue asphyxia. The cord was at once tied and cut, and artificial respiration by Schultze's method practised, and the child, a fine boy weighing $7\frac{1}{4}$ lbs. soon cried out lustily.

After peeling off the placenta and membranes, and disinfecting the interior of the uterus, the next step was to bring the edges of the uterine wound together by sutures. The material chosen was silk, and the method that recommended by Prof. Fritsch, in No. 23 of the *Centralblatt f. Gynaekologie* for 1889. I was led to adopt this method from its simplicity, for except that the stitches are closer together, they are passed just the same as in closing the abdominal wall. They are introduced one cm. from the edge of the uterine wound, pass through the muscle and decidua, emerging through the latter about $\frac{1}{2}$ or $\frac{3}{4}$ of cm. from edge of the wound, and continued through the opposite side of the wound in like manner. Sixteen stitches were thus passed and tied tightly, and the elastic ligature was then removed. The uterus contracted badly, and some oozing of blood took place, which was stopped by passing an additional suture, and applying hot sponges to the uterus, and kneading. The abdominal walls were then closed by sixteen stitches, and the usual Lister's dressing was applied. The patient now seemed very pale, but it was not till she was raised to put on the abdominal bandage that I was aware that she had lost a very considerable quantity of blood per vaginam. This, however, had then ceased to be more than what was natural, and so the patient was put to bed.

The after-history of the case need not delay us. The patient's temperature on the second and third day was just above 100° , and on the fifth and ninth days just touched 100° , but her pulse was very quick for the first four days, being 140 the morning after the operation. She showed no symptoms of sepsis, however, and I was forced to the conclusion that it was caused partly by the *post-partum* hæmorrhage, and partly perhaps by the five per cent. solution of carbolic acid with which I swabbed out the uterus.

The sutures were removed on the twelfth day, when the union was found to be perfect, and the girl got up on the twentieth day. More than five weeks after the operation she got a sudden rise of temperature up to 102° with a pulse of 120, which seemed to be connected with the return of menstruation, and soon subsided. I have lately heard about her, and she says she is not feeling quite strong, and that two of the uterine sutures have been expelled per vaginam.