OPERATIONS DURING PREGNANCY.

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THE question of operations during pregnancy is no longer a novel one, and my purpose in making this report to the Society is not to advocate any new views upon the subject, but simply to report my experience in dealing with this class of cases.

My experience embraces twelve cases; five of ovariotomy, one of myomectomy, one of hystero-myomectomy, one of appendicitis with abscess, one of intestinal obstruction during pregnancy, one of intestinal obstruction after labor, and one of fistula in ano. One patient aborted, but the ovum was dead before the operative interference, which only hastened the abortion which was inevitable. The patient upon whom myomectomy was performed also aborted. This operation was not premeditated, having been undertaken with the diagnosis of ovarian tumor. The results of myomectomy in the hands of others have been so unfavorable from the standpoint of bringing on abortion, that in my judgment the conditions must be unusual to make the operation justifiable. As a routine procedure it is certainly contra-indicated. All of the ovariotomies did well, this experience corresponding with that of other surgeons, and being in happy contrast to the result of the let-alone practice which so often leads to difficulties in delivery, and, unless prompt and intelligent operative measures are taken, to the bruising, infection and necrosis, of the tumors, with peritonitis subsequent to labor. In none of the cases was there the least difficulty in the performance of ovariotomy, and in every way the patients made as good recoveries as though they had not been pregnant.

In one case, in addition to the ovarian tumor of the left ovary, there also existed a parovarian tumor upon the right side. In this case the left appendage was removed, and the parovarian tumor was peeled from its bed in the right broad ligament, thus leaving *in situ* the normal right uterine appendage. This operation was among the early ones in which this procedure was practised. In

my opinion, it is one of the best additions to conservative gynecology.

The following are the cases I have met with:

Mrs. O., aged twenty, one miscarriage, was admitted to the hospital September 7, 1892. The history was, that, having missed her monthly sickness some three months previously, she had had irregular bleeding from the uterus, with severe abdominal pain, accompanied by faintness. On examination a mass was found filling the left half of the pelvis, and having the characteristic feel of old blood-clot. To the right and above could be felt a rounded body, which apparently was the fundus of the uterus displaced by the mass filling the left half of the pelvis. A diagnosis of hematocele due to ectopic pregnancy was made, and an abdominal section was performed with this diagnosis. On opening the abdomen it was found that we were dealing with an intra-uterine pregnancy. There was a distinct sulcus in the fundus, the right half of the fundus having the appearance of a slightly enlarged fundus of the normal uterus. The left half was very much distended and entirely filled the left half of the pelvis. I supposed that we were dealing with a bifid uterus, the left half of which was pregnant. The patient aborted, when the explanation of the physical signs was very simple. It was found that the left half of the uterus was filled with old, laminated blood-clots, this condition giving the ordinary signs, on examination, of hematocele, and the bifid uterus, of which only the left half was distended, had led to the diagnosis of ectopic pregnancy. The patient made a good recovery, and was discharged on the 29th of September.

Mrs. P., aged twenty-seven, multipara, was admitted to the hospital May 15, 1893. Her general condition was bad; she was five months' pregnant; and had an ovarian tumor of the right ovary, containing about one gallon of fluid. Ovariotomy was performed on the 17th. She made an uninterrupted recovery, and was discharged on the 18th of June. I learned subsequently that her pregnancy pursued its normal course, and she was delivered at full term of a living child.

Mrs. M., aged twenty-one, mother of one child, in fair general condition, was admitted to the hospital, May 16, 1893. She was three months' pregnant, and had a small ovarian tumor of the right ovary, containing less than a quart of fluid. Ovariotomy was performed on the 19th. She made an uninterrupted recovery, and was discharged June 10th. After her return home she pro-

duced an abortion upon herself, and died of blood-poisoning about six weeks after her discharge from the hospital.

Mrs. A., aged thirty-eight, nullipara, was admitted to the hospital December 1, 1894. She was recently married, and had immediately become pregnant, and was mortified to find that very soon her abdomen was much larger than the period of her pregnancy, which had advanced to two months when she came under my observation. She had a freely movable pedunculated tumor, which was very soft on palpation, and which was supposed to be an ovarian tumor, some three or four inches in diameter. Abdominal section was performed on the 3d, and on withdrawing the tumor from the abdomen it was found to be a pedunculated œdematous fibroid. The pedicle was very small, and it was decided to remove the tumor. In spite of the very free use of morphia, the patient aborted on the fourth day after operation; otherwise she made a good recovery, and was discharged on January 2, 1895. This patient subsequently became pregnant, and was delivered at term of a living child. When I last heard from her, she was in good health, and had had no additional children.

Mrs. H., aged twenty-seven, nullipara, in good general condition, was admitted to the hospital June 5, 1895. She was some six weeks' pregnant, and was admitted because of a tumor of the left ovary, containing about a pint of fluid. The tumor contained an unusual amount of solid matter, the cyst cavities being small and the cyst walls unusually thick. It was also found that she had a small right parovarian cyst. Abdominal section was done on the 7th. The left uterine appendage and tumor were removed, and the right parovarian cyst was peeled out of its bed, leaving the ovary and tube intact. She made an uninterrupted recovery, and was discharged July 2. The pregnancy pursued an uninterrupted course, and a living child was born at term.

Mrs. K., aged twenty-nine, primipara, was admitted to the hospital February 27, 1897. She was pregnant three months, and suffering from an ovarian tumor of the left ovary, containing about one quart of fluid. Ovariotomy was performed on March 1. She made an uninterrupted recovery, and was discharged March 27. The pregnancy pursued a normal course, and she was delivered at full term of a living child.

Mrs. P., aged thirty-seven, mother of four children, was admitted to the hospital June 18, 1898. She was in fair general condition, but very anæmic. The abdomen was well-filled with a

large fibroid, which was growing rapidly. There was reason to suspect a pregnancy of two months. I was the more inclined to operate because this had been advised by another gynecologist of experience before the patient consulted me. The tumor was approximately five inches in breadth and ten inches in length. Hysteromyomectomy was performed on the 20th. The patient made an uninterrupted recovery and was discharged July 16. The pathologist, Dr. Babcock, reports that the tumor mass was largely made up of the intramural fibroid. A twin pregnancy of two months existed. He adds: "It scarcely seems possible that full term could have been attained in the presence of so large a tumor." This is the less likely in the case of a twin pregnancy, which was found in this case.

The last abdominal section which I have done during pregnancy I did during the current week, for obstruction of the bowels. The patient was about forty-five years of age, a working-woman, in bad general condition, that is to say, she was older in appearance than in years; she had hard arteries, and looked like a woman of fifty or fifty-five. The operation was done Friday, January 27, 1899. The patient's bowels had not been moved since the preceding Monday. However, she had been about and suffered no special inconvenience until Wednesday, that is, two days before the operation, when she began to vomit. The usual remedies for the vomiting and for the non-movement of the bowels were given; and, as her physician did not see her until Wednesday, there was no reason to suspect obstruction of the bowels; but as these measures did not succeed in emptying the bowels and the vomiting persisted, it was evident that she had obstruction. I saw her first on Friday, when she was constantly regurgitating the greenish-black fluid which precedes fæcal vomiting, and perhaps it was slightly fæcal, but it was not distinctly or markedly so. Repeated efforts were made over two hours to unload her bowels by irrigating the colon and by purgative enemas without any result, hence operation was decided upon. There was very little to guide one as to the location of the obstruction. There was nothing in the hernial canals. Apparently, there was an undue dullness in the right flank, and it was thought the patient might have an ovarian tumor in the right side, or that the most probable cause of the obstruction, if not due to tumor, would be appendicitis. Therefore, the incision was made in the right semi-lunar line. On opening the abdomen, we were confronted with the large ute-

rus, it being seven months' pregnant. On finding the vermiform appendix, it was normal. There was fluid in the peritoneum, but all that could be made out was that the intestines were paretic and much distended. However, I noticed that the ileum passed down into the pelvis, it seemed to me, unduly far, considering that the woman was pregnant, and on tracing the ileum I found it adherent in, or at least to, the femoral canal. She didn't have hernia in the sense that the bowel was in the canal, but densely adherent to the old sac of a hernia. The liberation of this bowel was quite difficult, because it was hard to expose the parts. The uterus was in the way, and the incision rather high to work in the femoral canal, and in trying to separate the very dense adhesions the bowel was ruptured and was subsequently stitched. I observed at the time that all the bowels in sight were distended, whereas, we are taught, if we have an obstruction of the bowels, that the part of the bowels below the site of obstruction should be collapsed. The incision was closed without drainage. I would have drained had not the seven months' uterus been in the way. The patient had had labor pains and the os admitted one finger. It seemed folly to drain, under the circumstances, and I thought it best to let the patient take the chances. The bowels were moved four times after operation, but the woman developed peritonitis and died. There was not only peritonitis, but there was also trouble with the lungs. Preliminary to the abdominal section, knowing that her stomach was full of the material which she was vomiting, the stomach was washed out, but, in spite of that, large quantities of the vomit constantly ran out during the operation, and more or less got into her bronchi, so there was every reason to have inspiration-pneumonia in addition to the difficulties in the abdomen.

After her death a post-mortem was made and it was found she had some peritonitis; and also that an additional band existed in the region of the sigmoid. It is quite possible that this had something to do with her death, although I believe she died of peritonitis.

My experience in this case, and the difficulties of finding anything in the abdomen, except the seven months' pregnant uterus, and the difficulties of dealing with the adherent bowel when we did find it, make me believe that it would be wiser in such a case, when we are dealing with so serious a condition as obstruction, to promptly do hysterectomy and get the big uterus out of the way,

and then we could proceed in a systematic way to do whatever is necessary. I am inclined to believe that the patient would have had a better chance for recovery had this been done.

I have seen a number of other operations during pregnancy. One, the first operation I ever had the pleasure of seeing Dr. Boyd do, was an ovariotomy in a pregnant woman. I assisted him, and the patient made a happy recovery.

Another operation with which I was connected was a case of appendicitis complicating pregnancy. I saw this with Dr. Boyd years ago, before we knew much about appendicitis. In that case the abscess was drained by Dr. Boyd, but the patient died. Dr. Boyd will be able to give us the details of the case.

I saw another case of obstruction of the bowels with Dr. Longaker years ago, where the obstruction was brought about by the fact that the bowel was adherent to the pregnant uterus. After labor, when the uterus sank down into the pelvis it made traction on the bowel and brought about obstruction. This patient died.

These cases constitute my full experience in abdominal surgery in pregnancy.

Mrs. C., aged thirty, multipara, was admitted to the hospital February 8, 1896, suffering from a fistula in ano of some months' duration. She was four months' pregnant. Believing that the risks of a labor at term, complicated by puriform discharges in contact with the peritoneum, was more serious than the risks of abortion, the fistula was incised and sutured. The wound suppurated, and it was subsequently necessary to pack it until it healed by granulation. She was discharged April 7. The pregnancy pursued a normal course, and at full term she was delivered of a living child.

With reference to the general principles to guide one in operations during pregnancy, I believe that, undoubtedly, all ovarian tumors which are recognized during pregnancy should be promptly removed, even quite late in pregnancy. The risks of operation are much less than the risks of delay. All of us have been obliged to operate after labor for peritonitis from the bruising of ovarian tumors, and not only our own experience, but that of every other surgeon, shows that the risks are very great when the tumor is allowed to obstruct labor. When this plan is followed my opinion is that the tumor should be removed immediately at the conclusion of labor.

Fibroid tumors, as already stated, I think should not be oper-

ated on by myomectomy during pregnancy, unless there is some very special reason to the contrary; because the chances of abortion are so great, and we practically invite it by interference. The only variety of fibroid tumor which it would be justifiable to remove would be a cervical fibroid or one situated very low in the pelvis, which could be gotten out by the vagina, and should be taken out in the later months of pregnancy, when, should premature labor occur, it would probably do no great harm.

With reference to conditions giving rise to the discharge of pus about the genitalia which are amenable to operative treatment during pregnancy, I believe operation is strongly indicated, as the risks of the operation are far less than is the risk of labor through the genital-canal soiled with pus.

With reference to general operations in various parts of the body, it seems to me that the indication for operation should be marked, that is to say, evidence should be present that the patient's life or health would be seriously jeopardized by leaving the condition continue until after labor. It has been necessary to operate upon pregnant women many times, and they are not apt to abort. The fear of bringing on abortion by operations in other parts of the body is not correct. So if the indication points strongly to operation, I believe it should be carried out. This applies especially to such diseases as appendicitis or cancer, which threaten life immediately or more remotely.

The only condition to which I care to refer in particular is that of hemorrhoids. The teaching of the books in reference to hemorrhoids is that they should be left alone until after labor. There are several serious consequences which may arise from this, and I think this teaching should be departed from in special cases. I know of one case in which the veins were so pressed upon during labor that the hemorrhoids sloughed. In my judgment it is a far more serious matter to have sloughing hemorrhoids complicating the puerperium than to tie them off, in the later weeks of pregnancy. I should not hesitate to remove large, painful hemorrhoids during the last month of pregnancy, so that the wound would be healed before labor came on.—(The American Gynecological and Obstetrical Journal, April, 1899.)