ABDOMINAL AND PELVIC OPERATIONS FOR THE RELIEF OF CONDITIONS INCIDENT TO THE PUERPERAL STATE.*

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THE subject under discussion is apt to be of interest to the general practitioner, and deals with questions that are liable to occupy any day a few hours of his life. It is not my intention to give you a very learned dissertation upon the various conditions of which I intend to speak, but a summary of my experience, and on this account I must ask you to bear with many imperfections.

FIBROID TUMORS AND PREGNANCY

Of all the curious tumors that grow grafted anywhere on the human being fibroid tumors are among the most curious. I have met with these tumors in all the various positions in the pelvis in conjunction with pregnancy in its early weeks and on up to term. The degree of the gravity of the case varies according to the situation of the tumor. When such a tumor is found in a young married woman who has never borne a child the prophylactic treatment to be adopted to prevent pregnancy is the removal of the ovaries and tubes; thus pregnancy will not occur, and early miscarriages, premature labor, and labor at full term, with all their accompanying dangers, will be avoided. But cases are met with that seem to stay the hand of the surgeon.

I on one occasion delivered a lady, the wife of a physician, with great difficulty of her first child. There was a large fibroid tumor situated on the fundus of the uterus at the time of this confinement. After a very prolonged illness she convalesced. In spite of every precaution there was septic infection. A gradual diminution in the size of the tumor followed. At the time of her second confinement the tumor had almost entirely disappeared. She was then delivered without difficulty. In this case the operation of oophorectomy would have saved the patient from a

*The address in Midwifery, read at the twenty-ninth annual meeting of the Canadian Medical Association held at Montreal.

dangerous illness, but would have cheated the world of another human being.

Another lady was seen in consultation during a miscarriage. The hæmorrhage was terribly severe, and a great deal of difficulty was experienced in removing the placenta. She made a good recovery, and becoming again pregnant a short time after consulted her attending physician and asked him to produce abortion. We consulted about the matter and decided to leave nature alone. She has since been delivered of a living child and made an easy recovery.

Another case may well be related in this connection, as it is one of considerable interest. A lady from South Africa married late in life. She was thirty-eight or forty years of age and had been married two years. I found a large abdominal tumor with two abdominal nodules and one pelvic nodule, and between them what I considered a pregnant uterus. She was pregnant about three months. The fibroid tumor had been growing with great rapidity, and two of the nodules were each as large as a child's head. Having performed Porro's operation on two previous occasions I decided in this case, with the consent of the patient, to adopt more conservative measures, and, with every antiseptic and aseptic precaution, I induced abortion. The placenta was removed, with the patient under chloroform, without any great difficulty. The uterus was then packed with iodoform gauze, and an execellent recovery followed. She was advised to return when stronger to have the tumor removed, but did not do so. Several years after I learned the sequel. She was persuaded to place herself in the hands of some of the quack curers, and, while rubbing salve on her back and filling her vagina with inert suppositories, the tumor, as a consequence of the stimulation afforded by the involution of the uterus following miscarriage, began to disappear. The patent medicine people scored a great victory, but were unable to give the true scientific explanation of the reduction in size of the tumor. The patient became again pregnant and was delivered of a living child.

In the light of this experience one must carefully weigh the question before deciding on the performance of Porro's operation or of oophorectomy in young women suffering from fibroid tumors. All cases of abortion and labor are not as easily terminated as the above-mentioned cases would lead one to suppose.

I was recently called to see a patient by Dr. Miller, of our city. He stated that she had been delivered by himself, with a great deal of difficulty, of a dead child, owing to the presence of a tumor in the pelvis that was obstructing delivery. The patient barely escaped with her life, and as she was now pregnant again he desired to have my opinion regarding the desirability of inducing abortion. On examination I found a

fibroid tumor the size of a child's head in the right lower abdomen, another of the same size in the left lower abdomen, and a third tumor of equal size blocking up the pelvis. Between these tumors was evidently a pregnant uterus; the pregnancy had advanced to about the fourth month. I advised the induction of labor; this was carried out by means of a sterilized bougie, and the fœtus in due time was delivered. The placenta remained in utero for twelve hours, until after my return from the country, as I was out of town. There had been in the interval no attempt on the part of the uterus to expel the placenta. After Dr. Miller had administered the chloroform I proceeded to remove the placenta. The knees were well drawn up into the lithotomy position and the interior of the uterus explored. It felt like a collapsed india-rubber bag that was being pressed together by three large balls, one to the right, another to the left, and another below. Even after the introduction of the hand into the vagina it was impossible to reach the fundus. By means of a pair of long placental forceps the placenta was picked away piece by piece. The operation consumed three hours. Several times I felt like desisting. The curette was used, but to little purpose. Forceps of different kinds were used, but the placenta remained very adherent and broke away in small pieces. The tumors were rotated in different directions in an effort to reach the point of attachment of the placenta with the finger. At last the two upper tumors were rotated one by one towards the front of the abdomen while the hand was inside the vagina, and in this way the fingers inside the uterus almost reached the fundus. The sulcus behind was not explorable with the finger. At last I decided that the two upper sulci were emptied of placenta, and trusted to luck for the emptiness of the posterior one. The uterus was then washed out with an antiseptic solution and packed with iodoform gauze. The patient made an excellent recovery. I had no idea that the removal of the placenta could be as difficult an operation. A complete hysterectomy would have been an easy task compared with the removal of the placenta in this case.

You will see that there are almost insurmountable difficulties to be met with in endeavoring to deliver as early as the fourth month per vias naturales. But parturition at a later date is a much more dangerous affair. The death of the child is liable to occur, and many of the mothers succumb.

In looking through the literature on this subject it is painful to read the accounts of the treatment adopted in many cases. Women who have been attended by their physicians for days, in the hope that some fortunate circumstance may perhaps assist in the delivery, are placed in the hands of the abdominal surgeon when too far gone to withstand the shock of any delivery through the anterior abdominal wall. I am satisfied that

there is less shock from the delivery through the anterior incision than there is when the foetus is pulled by main force down through the parturient canal, when the tissues are terribly bruised, and the placenta, that is adherent over the surface of the tumor, is in all probability but partially removed. Even when there is no great difficulty in the act of delivery itself the patients are in greater danger than those who have no fibroid tumor present in the uterus at the time of pregnancy. I saw one case die after nine weeks of septic inflammation. She had a small fibroid tumor in the uterine wall that became inflamed on the ninth or tenth day after delivery, and suppurated. I have seen large fibroid tumors suppurate on two occasions after delivery, and in these two patients the convalescence was very much prolonged. The discharge from the fibroid down through the uterus produced in each case excoriation of the external genitals and vagina, and when brought to the hospital they were in what one would call a filthy condition, not from any fault of their own, but as a consequence of the foul discharge.

The early emptying of the uterus has, in my hands, been satisfactory. But, owing to religious and moral feelings, some mothers may refuse to sacrifice the fœtus in utero for the sake of saving their own lives. When this is so, pregnancy must be permitted to proceed. When pregnancy has advanced to the later months, craniotomy, embryotomy, or difficult forceps delivery should not be thought of for a moment. If the patient can be delivered by the production of a premature labor that can be terminated without great instrumental force, and with a fair chance of saving the child, it may perhaps be tolerated; but if, under other circumstances, craniotomy or embryotomy or difficult forceps delivery are under consideration on the one hand, while delivery through an abdominal incision is under consideration on the other, the indication to my mind must always be in favor of an abdominal operation.

There is no reason why such patients should be allowed to become almost collapsed before these questions are taken up and carefully considered. There must always be weeks of waiting before the onset of labor, and it is in this interval that the attending physician must exert himself to place his patient in a position of safety. Plans can be matured and arrangements made with deliberation and without hurry. The fact that occasionally patients are safely delivered by the efforts of nature, or by the use of forceps after days of suffering, is no argument that such a delivery is the one that is most desirable. Though some are thus safely delivered many will die. That they recover after such terrible bruising of the parts and after suppuration of the tumor is more the exception than the general rule.

At the time of abdominal delivery another question will arise. Shall we

remove the child alone by Cæsarean section? Shall we remove the child by Cæsarean section, and also the ovaries, to prevent subsequent fecundation? Or shall we remove partially, or entirely, the uterus with ovaries and tubes? I would now prefer total extirpation of the uterus, having perfected the techinque of total hysterectomy. The presence of the fibroid after the uterus has been emptied must always be a menace to the patient whether the ovaries and tubes are present or not.

Fibroid tumors are met with in the vagina growing from the cervix uteri. One reads of what appears to be a brilliant result of an operation performed by one who, perhaps, considers himself a very brilliant operator. As a consequence of his audacity, such an operator will attack a fibroid tumor whether it is situated in the cervix of a pregnant uterus or growing from its wall into the abdominal cavity. The tumor is removed and the pregnancy is allowed to go on to full term, if nature permits it. In many cases nature objects, and the woman miscarries and dies. The accounts of such operations would be better unpublished. Of fifteen cases of removal of fibroid tumors during pregnancy five died, a mortality of 33⅓ per cent. Why such operations should be undertaken in these modern days I cannot understand.

It has occasionally happened that these fibroid tumors, growing from the cervix, contrary to the expectation of those in attendance, have been drawn up during the progress of delivery, and the fœtus has been permitted to pass into the vaginal canal. Enucleation of such a fibroid at the time of labor must greatly increase the danger to the patient, and should not be undertaken when abdominal delivery can be carried out with so little risk.

OVARIAN CYST AND PREGNANCY.

After delivery the abdomen may not diminish in size, and the doctor is somewhat puzzled. On careful examination he finds the uterus reduced and empty, and a mass lying to either one side or the other in the abdominal cavity. The patient has completed her pregnancy, and been successfully delivered, while carrying an ovarian tumor. It is fortunate for some of them that the ovarian tumor is not discovered until after delivery. With the modern craze to do abdominal surgery, ovarian cysts have very short shrift. From my own observations I am satisfied that it is safer to leave such ovarian cysts untouched until after delivery has been accomplished, unless the life of the patient is seriously threatened by their presence. It is not often that the life of the patient is seriously threatened by the presence of such an ovarian cyst.

It is sometimes a matter of marvel to find an abdomen enormously distended and the patient but slightly inconvenienced. We have all seen ovarian cysts containing many gallons of fluid. Patients may live for

months in this distended condition. The breathing becomes embarrassed, the feet become swollen, but yet they are able to live.

It is, no doubt, very pleasant and very gratifying to find that the pregnant uterus behaves itself after an ovarian cyst has been removed from its side. But such pleasant surprises are frequently turned into mournful regrets when the woman, who was suffering but little, miscarries on the third or fourth day after operation and dies. The ovarian cyst is not like the fibroid tumor, prone to inflame after delivery. A pregnant uterus may be very much irritated by an abdominal operation, but an ovarian cyst is very little affected by a uterine delivery.

I always regret the termination of one case of ovarian cyst accompanying pregnancy. The patient was a strong, healthy woman. Three of us saw her in consultation. We diagnosed the condition present. She had a large ovarian cyst, and was in about the sixth month of pregnancy. Operation was decided on, and in the endeavor to remove the ovarian tumor the surgeon who was operating nicked the uterine wall with a scalpel. The uterus was considerably handled, in order to keep it out of the operator's way. I thought at the time that the uterus should be emptied, but this was not done. Subsequent to the operation the patient miscarried and died.

When life is seriously threatened nature will endeavor to empty the uterus, just as she does in the case of uræmic poisoning and of great emaciation induced by the persistent vomiting of advanced pregnancy. If nature, under such circumstances, fails to bring on labor, she can surely be assisted, and labor can be artificially induced without any very great amount of risk. The tumor can then be dealt with at a later date.

I have on four occasions operated on women a few weeks after confinement. In one case the operation was done for the relief of an enormous ventral hernia, and on two occasions for the removal of ovarian cysts. The infants were brought to the mothers three or four times a day to nurse, and they were fed at night-time. In one case the milk entirely disappeared after a few days. In the others the flow was diminished for a time, but again became abundant. The patients all made excellent recoveries. It is unnecessary to wean the children, and endanger their lives in the middle of a hot summer, before submitting the mothers to an abdominal or less serious operation.

The greedy surgeon can surely wait for his abdominal operation until after the obstetrician has delivered the woman. Some men, rather prominent in the profession, tell us in a general way that it is easy to open the abdomen, to remove the cysts, and allow the pregnancy to proceed to term. This may be all very well for the surgeon, but is it best for the patient? In the presence of an ovarian cyst with a twisted pedicle,

whether accompanied or not by pregnancy, all must admit that abdominal operation is generally demanded. But ovarian cysts do not become twisted more frequently in cases in which pregnancy exists than in cases in which the uterus is empty.

If puncture of an ovarian cyst is considered necessary it should be set aside for the induction of premature labor or ovariotomy, because puncture should never be performed unless the cyst is impacted in the pelvis and seriously obstructs the progress of labor. There are three methods of procedure when a cyst is impacted—first, abdominal section on the mother; secondly, mutilation of the child; and, thirdly, puncture of the cyst. Some cysts can, of course, be tapped from the vagina and the difficulty can be removed, but now and then a cyst will be met with in which there is either colloid material, or fibroid material, or dermoid material that will not readily disappear after puncture.

On one occasion I assisted to tap through the vagina such a colloid tumor of the ovary pressed down in the pelvis, and the patient made a complete recovery. The operation can easily be carried out, and then the opening can be made large enough to permit of the flow of thick material. Mutilation of the child should certainly not be undertaken. If abdominal section on the mother is performed, in such a case it will be necessary to remove the uterine contents before the tumor can be reached. The removal of the entire uterus can scarcely be justifiable in such a case; the other ovary, if healthy, may permit of future pregnancy. It must be remembered that occasionally a distended Fallopian tube may interfere with the progress of labor.

HYDRAMNIOS SIMULATING OVARIAN CYST WITH PREGNANCY.

There is a condition of the pregnant uterus that frequently simulates the presence of an ovarian cyst with a pregnant uterus, namely, hydramnios. It is an uncommon condition. Three cases have come under my observation. I do not here refer to cases in which the amniotic fluid is large in quantity, but to cases in which it is so great in amount as to give rise to definite symptoms. One case I saw was under the care of a surgeon of note. The case was diagnosed as one of ovarian cyst, and an abdominal operation was decided on. Just before undertaking the operation a further examination was instituted. A sound was passed into the uterus, the membranes were ruptured, and a free gush of amniotic fluid at once demonstrated the erroneousness of the diagnosis. Notwithstanding this fact a supravaginal hysterectomy was performed. I considered the operation an unnecessary mutilation, and, as a consequence, made a careful search through the literature of the subject to endeavor to find something to justify such a procedure, but without success.

In these cases the diagnosis is sometimes difficult. Ballottement is not easy to obtain. In some cases the abdominal walls are so tender that the patients can scarcely bear the weight of the bedclothes. In others, where the filling with fluid has been very acute, the temperature is elevated, and the disease has an inflammatory appearance; the pulse becomes accelerated.

Of McClintock's thirty-three cases four died after labor. Other authors, however, Caseaux, Leischman, and Charpentier, considered that the performance of puncture of the membranes through the vagina was followed by good results to the mother.

I bring this subject before you owing chiefly to a personal experience. I was asked to see a patient who was supposed to be suffering from an ovarian tumor accompanying pregnancy. Operation had been decided on. After carefully examining the patient, I was forced to differ from my confrères, for to me the case appeared to be one of hydramnios. There was something puzzling about it. The cyst was monolocular, and the uterus was apparently absent. A line of demarcation could be made out down the front of the tumor separating two pyriform masses with soft walls, but, notwithstanding this fact, the fluctuation wave could be felt distinctly from side to side and from below upwards. Bringing to mind the previous experience already related above, I strongly advised a preliminary puncture of the membranes from below. This was done, and an immense quantity of fluid escaped from the uterus. The patient was readily delivered next morning of twins, and made an uninterrupted recovery. There was no ovarian tumor present. The twins were, as is frequently the case, stillborn. The depression between the placenta and the fœtus and the presence of a second fœtus produced a peculiar condition of the uterus noted in front.

The main point in the differential diagnosis between ovarian cyst and pregnancy and hydramnios was the universality in the wave of fluctuation demonstrating the fact that the tumor was monolocular. In any such cases in which there is a reasonable doubt puncture of the membranes from below should be carried out before any attempt is made to remove the cyst by cœliotomy.

PELVIC CONTRACTIONS AND PREGNANCY.

The subject of craniotomy versus Cæsarean section has been discussed so much that there is nothing new to add. Neither operation is likely to meet with what should be its full measure of success, because the patient is only attended to when almost in a moribund condition from her prolonged sufferings. To perform craniotomy before this period has been reached is, from the very fact that the fœtus will in all probability be alive as the patient is not exhausted, loathsome in the extreme. As Barnes

says: "In the whole range of the practice of medicine there arises no situation of equal solemnity." When the child is dead there can be no particular objection to the operation of craniotomy, and it is not likely to be of much use, because, whether craniotomy be performed or Cæsarean section be carried out, the mother is in many cases already beyond hope of recovery. To my mind, this should be one of the strongest arguments in favor of Cæsarean section, an operation that aims at saving the life of both mother and child.

I have several times been called in consultation to see cases in which the operation of craniotomy had either been instituted or carried out, and have been obliged to stand by and see the patients gradually sink from shock. When called in to see such women the pulse generally ranges between 130 and 140, and they are completely exhausted. They generally die within twenty-four or thirty-six hours after delivery. There is no reason why Cæsarean section should not be performed on a strong woman before exhaustion has set in from prolonged labor, with as much success as the abdominal surgeon performs hysterectomy or Porro's operation. The pregnant condition should not increase the rate of mortality.

In the minds of all thinking men a final decision has no doubt been arrived at, and nothing can be gained by any further discussion of the subject. But, notwithstanding all that can be urged, craniotomy will still be performed by a few. Craniotomy and Cæsarean section, if done early, are equally safe to the mother, but not equally safe to the child. If performed late they are equally dangerous to the mother, but not equally dangerous to the child. Therefore, whether performed early or late, the position as regards the mother is but little altered, while the child has everything to gain from Cæsarean section and everything to lose from craniotomy. The choice between the two procedures must depend to some extent on the religious and moral feelings of the parent and the humane scruples of the practitioner. To thrust a perforator into the brain of a living child must always be a revolting procedure. Above all, let me urge in cases of difficult labor or pelvic contractions early consultation with other practitioners, because the early moments are the golden moments, and the lives of two human beings hang in the balance.

PREGNANCY AND INTRA-ABDOMINAL DISEASE.

If an inguinal or femoral hernia becomes strangulated in a pregnant woman and cannot be reduced by taxis operation is imperatively demanded. In such a case the question of emptying the uterus cannot for a moment be entertained. The uterus is not handled, the abdomen is scarcely opened, the incision is not in the median line, and the patient is therefore not likely to miscarry. But there are other cases in which the ques-

tion of emptying the uterus at the time of performance of abdominal operation must be carefully considered.

Some months ago I was called to see a patient who, three years before, had been operated on for the removal of an ectopic gestation. I found her six or seven months pregnant. On the day previous she had been taken suddenly ill with an acute abdominal pain. The doctor in attendance thought that the acute pain must have some connection with the previous operation, and that the uterus had perhaps ruptured at the cornu where the tube had been removed. Vomiting set in and was persistent and stercoraceous. We advised immediate removal for operation. She refused, and thus a delay of two days occurred. The patient, then feeling much worse, consented to an abdominal operation. She was removed to the hospital, where the abdomen was opened, but by this time she was scarcely in a condition to withstand any serious shock. A coil of intestine was found strangulated beneath a band and released. The uterus was enlarged to about the sixth or seventh month of pregnancy. The released intestine was very dark in color, but still glossy. The patient improved until midnight, when she began to miscarry. The uterus was emptied, but she began to sink and died at 6 a.m. For a few hours after the relief of the strangulation her condition improved and vomiting ceased. I am satisfied that the extra physical strain and loss of blood incident to the emptying of the uterus militated greatly against her recovery.

In this case it is perhaps not likely that she would have recovered, even if the uterus had been emptied at the time of the operation. There had been too much delay. But still the question must present itself to us in certain cases that if called upon to operate for intestinal obstruction by bands, volvulous, intussusception, perforated appendix, ovarian cyst, with twisted pedicle, on a woman in a pregnant condition, whose uterus contains a fœtus at about the fifth to the eighth month, is it wiser to leave such a uterus to empty itself subsequent to operation, or to empty it at the time of operation by means of Cæsarean section? I believe that if the patient's condition warrants a somewhat more prolonged operation than that necessary to relieve the exact condition for which abdominal section has been performed, her best interests will be served by rapid, careful, and a thorough evacuation of the uterus by the abdominal route. She will then have nothing to contend with after the usual shock of operation and danger of peritonitis is passed.

RUPTURE AND PERFORATION OF THE PREGNANT UTERUS.

In connection with this subject I beg to call your attention to the close similarity of the symptoms accompanying three conditions that are commonly met with and that may require abdominal section. The first of

these is gonorrhœal endometritis and salpingitis; the second is ruptured ectopic gestation; and the third attempted abortion with perforation of, or intraperitoneal escape from, a pregnant or a non-pregnant uterus.

There is such an endeavor to conceal the truth in these cases in which abortion has been attempted that we are very liable to be led astray, and to diagnose either of the other conditions mentioned in this connection. We are thus liable to be induced to open the abdomen.

The diagnosis of gonorrhœal endometritis is surrounded with difficulties. The exact facts of the case are either unknown or untold. An eminent authority has said that he would not believe a woman on her oath when it suits her purpose to conceal the truth. Neither married nor unmarried women are to be relied on. After they have endeavored to procure an abortion on themselves, or after an attempt has been made to procure abortion on them by others, it is difficult to wring the truth from them. Even the husbands are not made aware of the true cause of the illness. We are frequently asked by such patients to conceal the facts from the husband. In the section from which I draw my patients this instrumental interference with pregnant uterus is becoming more prevalent. Catheters, crochet needles, pen handles, knitting needles, intrauterine injections, are among the various popular means of producing miscarriage. I am satisfied that a perforation of the uterus is frequently occasioned, and that occasionally fluids are forced through the Fallopian tubes into the peritoneal cavity. These perforations usually occur on the left side, because they use the instrument in the right hand. The thickening is usually found on the left side. The injection of fluid is most dangerous in a case in which pregnancy does not exist. The patients suspect they are pregnant because they have gone two or three days over the usual period.

I have carefully prepared a table setting forth the differential diagnosis between acute gonorrhœal endometritis and salpingitis, ectopic gestation and attempted abortion. From a careful scrutiny of this table it can be seen that it is an easy matter to be led into error. Such errors may either precipitate a fatal termination or lead to a fatal procrastination. I have often been puzzled in attempting to unravel cases of attempted abortion. Some of the modern women are wise enough to anticipate the questions of the physician, and to give evasive answers.

	Acute Gonorrhœal Endometritis.	Ectopic Gestation.	Attempted Abortion.
Previous health.	Good.	Perhaps history of previous attack of inflammation and sterility.	Good. Very likely had children fast if married.
History of discharge.	Mattery discharge, perhaps swelling of labia.	No mattery discharge.	Leucorrhœa. No swelling of labia.
Menses.	Menstruation profuse, commencing perhaps at an irregular time, and lasting for ten days to three weeks. No period missed. Discharge not offensive.	A period missed, then irregular discharges of blood, more or less profuse. Discharge not offensive.	A period missed, perhaps only one or two days. Then discharge of blood lasting indefinite time as instrument is often introduced at frequent intervals in desire to bring something away. Patient towards last becomes more desperate and uses more force. Discharge often offensive.
Pain.	Gradually growing worse.	Spasmodic. At times very acute. Spreads over a considerable portion of time. Sometimes only one sudden severe pain.	Sudden pain, perhaps followed by spasmodic pains, over a considerable period of time.
Collapse.	Not collapsed.	Often collapsed at time of rupture and at each successive hæmorrhage.	A partial condition of collapse. If from escape of irritating fluid injected into uterus through Fallopian tubes, definite collapse found, but it does not recur.
Temperature.	Elevated. Often simulates typhoid.	Not very high.	Very high. Simulates typhoid.
Pulse.	Not rapid, unless general peritonitis present.	Varies. Rises with each hæmorrhage into peritoneum. Goes up suddenly and comes down quickly.	Very rapid, hard, inflammatory. Remains up.
Rigor.	No rigors as a rule.	No rigors at this period.	Rigors present.
Appearance—Face.	Not much altered.	Pale. Pupils generally dilated.	Anxious. Often slight delirium. Flushed, as if in high fever.
" —Skin.	No perspiration at first. Dry skin.	Sallowish. Intermittent perspiration. At times bathed in perspiration.	Intermittent perspirations, coming chiefly after chill.
—Abdomen.	Distended, if peritonitis general. Muscles tense, tender.	Slight puffing. Perhaps resistance from intraperitoneal clot. Shifting dullness as clot shifts with patient's change of position. Not very tender.	Slight puffing at this stage. Vermicular action of intestines can frequently be seen. Distinctly localized tenderness simulating, if on the right side, appendicitis.
" —Breasts.	No enlargement. No change.	Perhaps enlarged and changed. Often had a period of sterility.	Perhaps enlarged and changed. Often still nursing last child.
Position.	On back Feet drawn up. Does not care to move much.	Restless. Turns from side to side.	Assumes any position. Perhaps dragging pain if lies on one side.
Vomiting.	At first not persistent unless general peritonitis.	Not a marked symptom.	Irregular vomiting after taking food. Not persistent. Vomiting may have been present before as a consequence of pregnancy.
Onset of symptoms.	Definite history usually given. No apparent reserve, as patient frequently has no idea of cause of trouble.	Definite history given. No reserve. Onset usually definite. No particular anxiety at non-appearance of menses.	No definite history given. Evasive answers. Contradictory statements. Though history tallies closely with that of ectopic gestation it lacks definiteness. Occasionally, if carefully questioned, shows that she was anxious at non-appearance of menses.
Digital examination.	Matting of parts on each side of uterus. Uterus somewhat fixed.	Mass on one side of uterus and behind. Clot may occasionally be felt breaking down under finger. Boggy feeling. Uterus perhaps slightly enlarged.	Mass usually on left side of uterus. I think from use of right hand in passing instrument, thus perforating fundus at left side. No boggy feeling. No clot felt.
Bladder.	Frequent history of irritability of bladder.	Irritability of bladder, not a marked symptom.	Irritability of bladder not a marked symptom.
Rectum.	Sometimes gonorrhœal proctitis and rectal tenesmus, with passage of blood-stained mucus.	Often constipation and sometimes rectal tenesmus. No blood with any mucus passed. More a desire to have bowels moved with ability to defæcate.	Often septic diarrhœa.
Health of husband.	Often has had inflammation of kidneys or bladder (so-called).	Good.	Good.

When unable to make the symptoms fit in accurately with those of ruptured extrauterine pregnancy or gonorrhœal endometritis, I usually conclude that, in spite of all denials, there is something that is being held back, and that, in all probability, some intrauterine interference has taken place. In such cases it is wise to stay the hand and refrain from advising an immediate cœliotomy. Within another twenty-four hours some little incident may crop up that will finally settle the diagnosis. At more than one consultation I have been able to obtain the information during the absence of the family physician from the room. They will sometimes tell the consultant what they are ashamed to tell the family physician. On one occasion I fortunately taxed the husband with having had an attack of gonorrhœa, and with having infected his wife, when, to save himself, he broke the seal of secrecy and admitted that his wife had on several occasions used an instrument to bring on miscarriage. The symptoms of this case pointed strongly to a diagnosis of ruptured extrauterine pregnancy, and I was about to advise an early abdominal section. The patient herself had denied everything.

In these cases death occurs in one or two ways—either from general peritonitis that is rapidly fatal, or from a condition of septicæmia, with high fever, rigors, and a rapid pulse. In the case of acute general peritonitis it seems impossible to accomplish anything by operation. I have operated on a few such cases, but have failed to save life. I have never yet removed the entire uterus and appendages for the relief of the second condition of septicæmia. As a rule, they will be too far advanced to benefit from any operative procedure. The physician in attendance is misled for several days, and valuable time is lost.

I desire now to draw your attention to what I consider is an unique procedure for the treatment of rupture of the pregnant uterus. A patient suffering from rupture of the uterus is usually collapsed, and can ill afford to stand the shock of a long-continued operation. There are two indications: First, to remove the blood from the interior of the abdominal cavity; and, secondly, to drain the uterine cavity and the site of the laceration.

I was called to see a patient with rupture of the uterus following miscarriage at the fourth month. In examination through the vagina the finger could be passed through the posterior uterine wall into the abdominal cavity, and the intestines could be felt. Twenty-four hours after the rupture took place I opened the abdomen, washed out blood from under the liver and spleen and from among the intestines, and then examined the uterus. A large rent was found extending from the left cornu down into the base of the broad ligament on the right side. The patient was in a shocked condition, and I considered it advisable to complete the operation as speedily as possible. The edges of the tear were too ragged and friable to permit of stitching. I decided that there would

be, in all probability, some sloughing of these edges. Having frequently performed hysterectomy and drained down through the vaginal vault after removal of the cervix with a rope of iodoform gauze, I concluded that this would be good treatment in the present instance, and, therefore, passed up a pair of forceps through the vagina, opened the blades, and caught a rope of iodoform gauze and drew it down through the laceration on the posterior surface of the uterus. After sufficient had been drawn down the upper end of the gauze was cut off level with the peritoneal surface of the uterus, thus leaving a plug of gauze filling up the uterine tear, the uterine cavity, and the vagina. A drainage tube was then placed in the cul-de-sac of Douglas from the front. In this manner the interior of the uterus and also the peritoneal cavity were drained. The bleeding from the tear in the uterine wall had ceased. Before the operation was performed the pulse was gradually rising until it had reached 120, and distension of the abdomen was setting in. At the time of operation the intestines were partially distended and the peritoneum looked reddened and angry and the omentum was thick and œdematous, conditions that indicated the first stage of peritonitis. The patient made an uninterrupted recovery.

On two occasions I have been called in to operate on women with rupture of the pregnant uterus at full term. In each instance the patient has been found in a dying condition. Since the experience related above I am satisfied that a case of rupture of the uterus can be rapidly dealt with in the manner I have indicated. Time will thus be saved and shock diminished. Careful stitching of the ragged edges will often be impossible, and, I believe, will always be an unnecessary procedure. Unless these patients are *inarticulo mortis*, in the light of my experience I believe operation should be performed. In skilled hands but a few minutes will be consumed in its performance.

Because a patient occasionally recovers after rupture of the uterus and extravasation of the placenta or the child into the folds of the broad ligament, or into the abdominal cavity, we have no right to argue against operation in these days of modern aseptic surgery, when the abdomen can be opened with so little risk. From my own experience I find that the peritoneum, in many cases, does not tolerate the presence of blood, even when it has escaped in only a comparatively small quantity. Some cases of ectopic gestation, in which the sac has ruptured and a small quantity of blood has been poured out into the abdominal cavity, are shocked out of all proportion to the amount of blood lost. I believe that this excessive shock will also be noted in many of the cases of ruptured uterus. There is a great similarity of symptoms in cases of intraperitoneal hæmorrhage.

At some future meeting I will endeavor to finish the subject, as my address has already passed the normal limits.