# The Present Status of the Vaginal Operation for Diseases of the Pelvic Organs.

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The time has come for a careful revision of our experience with the vaginal operation and a calm judgment of its utility. The new, so attractive to a large number of the profession, has gradually lost its newness, and with a considerable mass of evidence, *pro and con*, presented from different sections of this country and from abroad, we are now in a position to ask and answer the question: Are we better able to treat patients suffering with diseases of the pelvic organs now than we were before the resurrection and extension, under the stimulating influence of the French surgeons, of the operation years ago tried and abandoned by Thomas, Gilmore, Battey, and others?

By the vaginal operation is meant the direction of attack and procedure in different operations upon the pelvic organs—draining abscesses or inflammatory exudates; removing tumors, the uterus, or the appendages.

It is only natural that after years had been spent in perfecting technique and developing dexterity in the abdominal operation, a change so radical as that involved in the vaginal method should meet with opposition. Objections the operation has, and now, after several years of experience with it, we know something of what the objections are, something of what the limits of the operation should be.

It is said that the vaginal operation is a difficult one, and this must be admitted even by those who favor vaginal work and use this route in a large proportion of their cases. It certainly re-

quires more practice to become familiar with it than the abdominal operation; but here as elsewhere experience removes the difficulties and practice gives dexterity.

Certain dangers have been emphasized as being more marked in vaginal than in abdominal work. Of these, hemorrhage and injury to the neighboring viscera, with resulting fistulæ, have been made especially prominent. It must be confessed that there has been ground for criticism in the early work of almost all who have tried and practised the vaginal method, and occasionally one has been obliged to open the abdomen to check bleeding, the control of which he did not feel sure of from below. As experience has increased, however, and we have better learned to judge the class of cases suitable for vaginal attack, the control of hemorrhage has been found to cause little, if any, more trouble than in abdominal operations.

Rectal fistulæ during one's early experience with vaginal work occur, perhaps, with rather greater frequency than when operating through a large abdominal wound with the patient in the Trendelenburg position. The differential feel between rectum and distended Fallopian tube is not always appreciated with ease. Even the entrance into the peritoneum through the posterior vaginal fornix, in one's early work, sometimes gives trouble, especially when the pouch of Douglas is obliterated by adhesions, and in our efforts to separate these adhesions the rectum has been injured. Experience and the selection of cases suitable for the method have helped largely to overcome this complication, and it is generally conceded that even if a fistula does occur, as a rule it closes spontaneously in a short time.

Thus far we have spoken chiefly of the disadvantages of the method and of its complications. Why should one wish to employ the vaginal operation if it is more difficult for the operator? Because we believe that in properly selected cases the operation is accompanied by less shock, the mortality is less, the convalescence is smoother, and even if the occurrence of hernia in a properly-conducted abdominal operation is rare, it must be admitted that in the vaginal method it is still more rare; the writer has never met with one in his own experience. Although the avoidance of an abdominal cicatrix is not a matter of great importance, if the operation can be equally well performed without one, it is usually appreciated by the patient. The rapidity of convalescence and

the shortness of time which the patient is required to be kept in bed are sometimes emphasized by enthusiastic advocates of the vaginal operation; but in the opinion of the writer, although the patients feel like getting out of bed sooner than in the abdominal operation, they should not be allowed to do so for at least two weeks. A firm cicatrix, absorption of exudate, and the future welfare of the patient are certainly more promoted by rest and quiet than by any attempt to see how early the patient can leave the bed.

In certain cases the vaginal operation has marked advantages, and in our discussion of the subject the most important feature is the selection of cases for which the operation is suited. The writer, on looking over the record of his vaginal work, found included in the list, aside from operations for the removal of the uterus and appendages, such operations as removal of the vermiform appendix, removal of a displaced left kidney, myomectomy at the fundus of the uterus, etc. Certainly the possibilities of the vaginal method are great, but the question before us as conscientious surgeons is not what *can* be done through the vagina, but what, in the interest of the patient, *can best* be done in this way.

It is only natural that in testing the merits of a new operation we should extend its use into fields whose boundaries riper experience tells us had better not be crossed. In my early vaginal work a number of patients were operated upon by this route in which the uterus appeared to be so healthy that its removal did not seem indicated in spite of the removal of both appendages. Although the results were good, experience and observation lead me to think that, except in the case of small ovarian tumors, *if the uterus is not to be removed*, the abdominal operation is to be preferred for the removal of one or both appendages. Small ovarian cysts and prolapsed diseased ovaries, requiring removal, form a class of cases often well adapted to the vaginal operation. Except in these instances, however, I believe that unilateral disease of the appendages is best dealt with from above, where the organs may be more thoroughly inspected, and those which are not to be removed may be left in the best possible condition for the future welfare of the patient. These are general rules, and many exceptions may occur. A woman with a roomy vagina and a thick, fat abdominal wall, with the mass to be removed lying low in the pelvis, is a favorable subject for vaginal work.

The vaginal operation has been tried in different phases of ectopic

gestation, but experience proves that except in cases in which rupture has taken place some time previously, and the resulting hæmatocele is well encapsulated, the abdominal operation is the one to be preferred. Many operations have been tried through the vagina for the correction of posterior displacements of the uterus, but on account of frequent dystocia among those in whom pregnancy has followed the operation, vaginal fixation of the uterus has been largely abandoned. Vaginal shortening of the round ligaments at present has rather a brighter outlook, but experience with it has been so limited that judgment must be reserved.

Into the general question of whether it is advisable after resection of a portion of a diseased ovary or tube to leave the remainder, if apparently healthy, I shall not enter, but will only say that if this conservative work upon the appendages is to be done, most operators are agreed that it is better done from above than from below.

A class of cases in which the vaginal operation has proved of great service to the writer comprises women who are pregnant and whose parturient canals are obstructed by tumors which cannot be raised out of the pelvis. I have three times observed this condition, and by vaginal removal of the tumor have enabled the patient to be delivered of a living child.

There are three groups of cases in which the vaginal operation has proven, in my experience, a great boon to suffering women.

1. Pus cases in which removal of the uterus and appendages is indicated.

2. Cases in which exudate indicates drainage without the removal of any organ.

3. Small fibromyomata.

The question of whether hysterectomy is indicated in every double salpingo-oöphorectomy will not be discussed in this paper. Suffice it to say, that the profession are pretty generally in accord that there are many cases of double pyosalpinx in which the uterus, enlarged, the seat of a marked endometritis, perhaps with cervix lacerated, had better be sacrificed if both appendages are removed. Experience seems to justify this conclusion, and it is just in these cases in which the vaginal operation, with its lessened shock, lessened handling of the intestines, and more complete drainage, finds its most perfect adaptation.

Puerperal septicæmia does not often indicate hysterectomy, but there are a few cases, which, in the latter part of the puerperium,

about the end of the first month, present pus foci in the uterine walls or in the appendages, or in both together. Here, again, vaginal hysterectomy has found a useful field. The writer has operated upon four such patients, saving two and losing two, a better result, I believe, than would have been obtained by the abdominal operation.

It has long been a familiar fact that patients profoundly septic do not endure well extensive operations; and it has long been the practice of many men, in cases in which there are large collections of pus, to drain the abscesses through the vagina and wait until the patient recovers from her sepsis before subjecting her to the radical operation. This certainly is a rational procedure, and its adoption has saved many lives by requiring, at a later date, a less extensive operation than would have been needed early, and sometimes by obviating the necessity of a subsequent operation.

Thanks to the work of Henrotin, of Chicago, we have found that in the relatively acute cases, before the formation of much or any pus, a great deal may be accomplished by vaginal incision, breaking up the adhesions about the appendages, and draining freely through the vagina. In one case, in which was threatened an extensive peritonitis from infected, retained secundines, the writer, by curettage of the uterus, vaginal incision, separation of the adhesions about the appendages, and free vaginal drainage, secured a rapid convalescence with no permanent damage to the tubes and ovaries. Two patients with pelvic peritonitis and exudate in the pouch of Douglas and about the appendages, with physical signs as nearly alike as two cases could be found, were placed by me in adjoining beds in a hospital ward. In one a vaginal incision was made in the posterior fornix, adhesions were broken up, and the pelvis was drained with gauze; the other was subjected to the usual routine treatment of vaginal douches, boroglyceride tampons, and counter-irritation. The former patient convalesced and left the hospital in just about half the time required by the latter. Of course, it cannot be proven that the two cases were absolutely alike, but the symptoms and physical signs resembled one another closely, and the rapid symptomatic cure in one by means of drainage was in marked contrast to that of the other. The writer would not be understood as recommending vaginal incision in every case of pelvic peritonitis, but when there is present evidence of fluid exudate in the pelvis, vaginal incision

and drainage will, I believe, shorten the convalescence and lessen the damage to the appendages.

Whether fibromyomata of the uterus should be attacked through the vagina depends upon their size and location in the uterus. If myomectomy is to be performed, unless the tumor is situated in the lower uterine segment or in the cervix, the abdominal route should have the preference. If hysterectomy is to be done, and the uterus and tumors together do not form a mass larger than a pregnant uterus of three or four months, the vaginal operation, with or without morcellation, has advantages so marked that one has only to watch the convalescence in such cases to be impressed with the fact that patients thus operated upon present but little more reaction than from a plastic operation for the repair of cervix and perineum.

Into the technique of the operation I shall only go far enough to emphasize the value of (1) morcellation, (2) the Mikulicz drain, and (3) ligatures. Those who have not tried and practised morcellation in some form or other in the course of a vaginal hysterectomy with an enlarged uterus, have certainly not availed themselves of their opportunities. The facility which is thus given the operator in acquiring needed space for work, and in reaching parts hitherto beyond his reach, can only be appreciated by those who have tried it. In the case of a fibroid uterus, with pus in tubes or ovary, morcellation proves of especial value; as, after the removal of the cervix and middle third of the uterus, and the splitting of the fundus, the fingers, or even the hand if it is small, may be introduced into the pelvis and the appendages enucleated. It is probably familiar to nearly all that the secret of success in morcellation lies in the fact that steady traction upon the uterus, with a reliable volsella affixed above the part to be removed, controls hemorrhage.

In all cases requiring drainage after vaginal hysterectomy, the principle of the Mikulicz pouch carried out in the following manner has given me most excellent service: A square handkerchief-shaped piece of gauze is opened out by an assistant and held in front of the vulva; a blunt instrument, like a sponge-holder, is placed by the operator against the centre of this gauze and pushed on into the pelvis. The fingers of the operator are now substituted for this instrument and carried up on one side until he feels that he is above the highest pedicle of that side. The end of a long narrow

strip of gauze is then passed along the finger, of course within the pouch, until it, too, is carefully placed above and against the highest pedicle; enough of the same long narrow strip is inserted to fill loosely that half of the pelvis. The fingers are then introduced above the pedicles on the other side, and the same process is repeated either with a part of the same long strip or with another. In this way the intestines are kept away from the field of operation, drainage is secured, and the strip of gauze may be gradually withdrawn from the pouch with scarcely any disturbance to the patient; the pouch collapses as its contents are removed and may be withdrawn as desired.

The profession is divided in the choice of clamps or ligatures as means of controlling hemorrhage. It undoubtedly is often a great convenience to use clamps at various stages of the operation, but the impression seems to be gaining ground that the comfort of the patient is better provided for if the clamps, when used, are replaced by ligatures before the patient leaves the table. In my own practice it is a very rare exception if the clamps are left on when the patient leaves the operating-room.

In conclusion we believe:

1. That there are many conditions in the pelvis not suited for the vaginal operation.

2. That care is required in the selection of cases for this work.

3. That small fibromyomata and small ovarian tumors are often well suited for vaginal attack.

4. That in pus cases indicating hysterectomy, and in cases requiring drainage, the vaginal operation has great advantages.

5. That in answering the question presented at the beginning of this paper we must admit that we are much better able to treat and cure patients suffering with disease of the pelvic organs now than we were before the development of the vaginal operation.