

## **Ventral Fixation of the Uterus and its Alternatives: Remarks Introductory to a Discussion.\***

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I HAVE undertaken to open this discussion because the Secretaries asked me to do so, not because I have any novelty to bring forward. The operation has now become one frequently performed, but its proper place among therapeutic agencies has never been discussed in this Society. Therefore it seemed to the Secretaries, and I agreed with them, that it would be a good thing that it should be the subject of discussion.

It seems to me to be unnecessary to discuss whether ventral fixation will remove the symptoms caused by retroflexion of the uterus. Everyone who has had any experience of the operation knows that it will. The question is not whether ventral fixation is effective, but whether in every case it is the best thing.

It is so simple an operation than when performed upon a freely movable uterus it ought to have no mortality. The mortality that it has had comes either from the accidents that will happen when safety depends upon human agency; or from the presence of some complicating condition.

I shall not discuss in detail the methods of performing the operation.

The subject upon which I put before you my opinions, which I hope may elicit valuable results of the experience of others, is the place of ventral fixation as a method of treatment.

Thirty years ago there were gynæcologists to be found who would attribute almost any symptom that a woman might complain of to a displacement; and would treat what they thought was a displacement with a pessary. At the present day we hear of places where it is taught that pessaries ought to be discarded. A learned Edinburgh gynæcologist recently wrote a paper in which he compared the opinions of different writers on diseases of women as to the use of pessaries; and having done this he went to the principal instrument maker's shop, and asked if there was any falling off in the demand for pessaries. He was told more and more were sold every year.

\* Read before the Obstetrical Society of London, December 6th, 1905. For the discussion which followed, see "Reports of Societies" in this number.

This is the first question for discussion. In what cases should we advise patients not to wear a pessary, but to submit to surgical treatment instead?

(a) There are some cases in which the answer is easy. There are cases in which with retroflexion there is great tenderness of the body of the uterus, arising as I think from congestion of the body of the uterus owing to compression of the veins against strong and tense utero-sacral ligaments. In these cases the patient suffers continuously from sacral and hypogastric pain, and intermittently from painful menstruation and dyspareunia. These cases do not form a larger proportion than one-tenth of the cases in which the uterus is retroverted. In some of them no vaginal pessary will support the uterus in a position of anteversion, and unless this is done the patient is not relieved. In such cases I think surgical treatment ought to be advised. Although the ailment is not in any way dangerous, yet the constant pain is enough to spoil the patient's life, and it is well worth her while to submit to operation.

(b) There are cases which Mr. Lawson Tait in 1887 spoke of as "one of the most dreadful conditions that the gynæcologist has to deal with"—language perhaps a little exaggerated. These are cases in which the uterus is fixed by adhesions in a retroverted position, and is very tender. In such cases the patient is often practically an invalid, and pessaries are no sort of use. Ventral fixation is here the only treatment that offers any hope of success. But it is unwise to be in such cases too confident of cure: first because it is difficult to say whether the pain is due to the retroversion or to the condition of the pelvic peritoneum. Secondly, because such patients are often neurasthenic, and if the pain be of a neurasthenic kind, operation will not quickly cure it. Thirdly, because the presence of adhesions which have to be broken down and will bleed increases the danger of the operation.

(c) There are cases, the majority of cases of retroversion, in which the uterus although fallen backwards is not congested. The folds of peritoneum which bound Douglas's pouch are so shaped that they do not compress the veins by which the blood from the uterus is returned. The displacement only causes symptoms because it is associated with slight descent. There is sacral and lower abdominal bearing-down pain, and there is often irritation of bladder. These symptoms are not severe, but they keep the patient in constant discomfort. The uterus is not tender, and therefore the pressure of any kind of pessary is tolerated. In most cases a pessary will give nearly complete relief. In a few a pessary will give complete relief. In a few

others the state of the vagina is such that it is not possible to find a pessary that will stay in position.

When a pessary will give relief, either complete or practically complete—that is that the pain becomes only slight and occasional,—I think the patient should be advised to be content with the pessary. The only drawback to wearing a properly-fitting pessary is the necessity of going to a doctor every few months for examination and cleansing. In many cases after the pessary has been worn for two or three years, the patient is able to do without it; when she goes without it either the displacement does not return, or if it does, the symptoms do not; the years of support by the pessary have enabled the pelvic floor to regain its normal tone. Put against this the accompaniments of an operation: there is a little risk to life; certain possible remote risks, about which we know little—risks I mean of hernia, intestinal obstruction, etc;—in any case three weeks' confinement. I think these are more serious inflictions than a visit to a doctor three or four times a year.

But if a patient is in continual discomfort all the time she is standing, and mechanical support fails to relieve her, then I think it is proper to resort to surgery.

Yet we ought not to fly to surgery in these cases without remembering that there are means of support which can be used in the most lax vaginas: I mean the different kinds of pessary that are kept up by straps attached to a waist belt—Cutter's and the various forms of cup and stem pessary. Patients differ much in their degree of satisfaction with these supports. There are fastidious patients to whom the use of these pessaries is extremely repugnant. There are others who either do not object to them, or prefer them to an operation. Whether one of these pessaries should be worn seems to me entirely a question for the patient. But I think the medical man ought not to press surgery on this class of patient without mentioning that there are other means of relief.

Supposing now that it is settled that relief is to be given by an operation; the question is, what operation? In the class of case that I first described—that is, a uterus retroflexed and very tender without appreciable prolapse, there are three operations, any one of which will lift up the body of the uterus so that its veins are no longer pressed upon, and the patient's symptoms are at once relieved. These are ventral fixation, Alexander's operation, and vaginal fixation. If there is no prolapse, and the cause of suffering is the tenderness of the uterine body, these three operations are equally efficient in relieving the patient.

In the second class of cases, those in which the uterus is fixed in the position of retroversion by adhesions, there is no choice. Ventral fixation is the only efficient treatment. The round ligaments will not stand the pulling necessary to break down adhesions. Few persons possess fingers so long that they can hook them over the *fundus uteri* from the anterior vaginal fornix and break down adhesions behind it. The abdominal route is that by which the condition of the tubes and ovaries is best ascertained.

In the third class of cases, those in which there is no tenderness of the body of the uterus, the symptoms are those of descent, and operation is indicated because mechanical support is not satisfactory, there is also, in my opinion, no choice. Alexander's operation will not cure these cases. A weak, aching, pelvic floor remains weak and aching whether the uterus be turned forwards or backwards. The only difference after operation is in the position of the uterus; the symptoms remain the same. This applies also to vaginal fixation. Ventral fixation lifts up the uterus, and to a small extent pulls up the pelvic floor. If there is no prolapse of the vagina ventral fixation will cure descent of the uterus.

But these cases in which, with nothing more than slight descent, relief of symptoms is anxiously demanded, are very often neurasthenic. Some of them can be cured by rest, without either pessary or operation. The enforced rest after ventral fixation is an excellent opportunity for treating the neurasthenia. If this opportunity is neglected, and the patient is allowed to continue living in circumstances unfavourable to her nervous health, the operation will be therapeutically a failure whatever its effect on the position of the uterus.

As there are cases in which we have a choice of operations, though these cases are few, we must consider their advantages and disadvantages. *Alexander's operation* was introduced at a time when the methods of procuring asepsis by antiseptics were less perfect than they are now; when the fact that the peritoneal cavity was opened in an operation meant additional danger; and when it was in consequence supposed to be an advantage of Alexander's operation that the position of the uterus was corrected without opening the peritoneal cavity. But at the present time, whether the peritoneal cavity is opened or not is hardly a thing to be taken into account. I think Alexander's operation a more dangerous operation than ventral fixation. I have published a case, and seen another, which proved fatal from suppuration within the pelvis along the track of the ligaments, extending to the peritoneum. It may be said

that such a result only indicates imperfect antisepsis, and is a reflection on the operator, and not on the operation. But I think not, for in these cases, the inguinal wounds, the only parts with which the operator's fingers and instruments had come into contact, had healed by first intention. I attribute the result to detachment of the ligaments from their vascular supply; for the round ligaments, like the ureters, are not very vascular. I have seen a case in which inguinal hernia followed the operation. This I grant is the fault of the operator in not properly sewing up the inguinal canal. In one case in my experience one ligament broke off, and the uterus had to be left supported by one round ligament only. I know not how the operator could have prevented this. I may add that this case was therapeutically a complete success. I have heard of other mishaps such as failure to find the ligaments, and division of the epigastric artery. I have seen statements in American literature implying that the number of unpublished cases in which the termination of the case was not that desired by the operator, is considerable. And unfortunate results of Alexander's operation do not invariably imply surgical incompetence, for among those who have told me of such results in their practice was the late Mr. Lawson Tait. But be the results what they may, I have not for years performed the operation and do not intend to do it again.

Methods of shortening the round ligaments by different modes of intra-peritoneal stitching have been devised. I have had no experience of them, and do not feel tempted to try them. I can perceive no way in which the result of any method of shortening the round ligaments can be superior to that of ventral fixation; and the objections to ventral fixation apply equally, it seems to me, to intra-peritoneal shortening of the round ligaments.

The therapeutic results of *vaginal fixation* are much the same as those that can be attained by Alexander's operation. In retroflexion with great tenderness of the body of the uterus but no symptoms of descent, vaginal fixation is successful in relieving the patient. But where the symptoms are wholly or partly due to descent, vaginal fixation will not cure them. If the pelvic floor is weak, a change in the position of the uterus will not make it strong. It is claimed as an advantage of this operation that it leaves no scar in the abdominal wall. But a small scar in the abdominal wall, if the muscles and fasciæ are properly sewn together, is no great matter. The cases in which vaginal fixation may be expected to be successful occur especially in unmarried women, and in them vaginal fixation involves destruction of the virginal characters of the vaginal orifice. This

may sometimes be thought a greater detriment than a scar in the abdominal wall. Vaginal fixation is a simple operation, simpler than Alexander's operation, and it is difficult to see why, with proper asepsis, any misfortune should arise from it. My own doubt about this operation is as to the permanence of the result. I have sewn a uterus into a position of anteversion, and years afterwards have found the uterus not indeed retroverted again, but less anteverted than it was immediately after the operation. The vesico-uterine cellular tissue is very loose; and as vaginal fixation practically consists in tying the uterus to this tissue, I think we cannot be very much surprised if in time this tissue should stretch.

In prolapse we have a different state of things to deal with. We must recognise that to the patient the only thing that matters is that she has a local condition that causes uncomfortable sensations. She knows not where her womb is, and is quite indifferent to its whereabouts. The uncomfortable sensations are due to weakness or injury of the pelvic floor. Now in great prolapse the changes in the pelvic floor are too extensive to be appreciably altered by fixing the uterus to the abdominal wall. If for prolapse ventral fixation alone is done, the invariable result, in my experience, is that within a few months the patient either comes back, or goes to another surgeon, complaining that the womb comes down as badly as ever. When she is examined, it is found that there is no prolapse of the uterus, but there is prolapse of the vagina. Cystocele and rectocele remain practically unaffected by ventral fixation of the uterus.

To be of use in prolapse ventral fixation must be combined with an operation to narrow the lower part of the vagina, so that prolapse of the vagina may be prevented. If combined with such an operation, ventral fixation is efficient in the cure of prolapse. Ely-trorrhaphy alone will not cure prolapse, because then the uterus comes down and bulges open the contracted vaginal orifice; but if this is prevented by tying up the uterus to the abdominal wall, the result of elytrorrhaphy will be lasting.

The subject of our discussion is ventral fixation and not the treatment of prolapse; and therefore I refrain from discussing other methods of treating prolapse. But I may be allowed to say that I think that in elderly widows the best treatment of prolapse is the removal of the uterus *and* vagina, and that in younger women I think the most hopeful treatment will be found in Hey Groves's operation for the repair of the *levator ani* muscle. But there has not yet been time for these operations to be sufficiently tested.

It is necessary now to consider the objections to ventral fixation. These are :—

First, the immediate danger, the risk of septic infection, and the risk of putting tension on the peritoneum. These ought to be prevented.

Second, the risk of hernia. Hofmeier mentions a case.<sup>1</sup> This, I think, can be prevented by careful suture of muscles and fasciæ.

Third, the risk of pulmonary embolism. I know not why this accident should follow ventral fixation, but Weindler<sup>2</sup> has mentioned a case in which death took place from this cause on the thirteenth day after the operation.

Fourth, I find four cases recorded<sup>2</sup> of death due to obstruction of bowel by bands passing from the uterus to the abdominal wall, long after the operation. I find other cases in which, in pulling tight the sutures, the bowel was nipped between the uterus and abdominal wall, and the abdomen had to be reopened to relieve obstruction thus caused.<sup>3</sup>

The last-mentioned accident surely may be prevented by proper care in the performance of the operation. As to the obstruction by bands, we know that adhesions of peritoneum to peritoneum are often absorbed, and that they stretch. If therefore in ventral fixation the peritoneal surface of the uterus is stitched to the peritoneum of the abdominal wall, it is not surprising that the adhesion should stretch and possibly in time be absorbed. If the adhesions should elongate into a band, then there will be danger of obstruction some day arising. But when peritoneum is stitched to muscle, as in colotomy, the adhesion neither stretches nor is absorbed. I think, therefore, that in performing ventral fixation the parietal peritoneum should be separated from the muscle, and the uterus stitched to muscle.

Fifth, Weindler states that he has once seen parametritis follow ventral fixation.

Sixth, suppuration has taken place along the suture tracks. These sequels are not of ultimate importance, but they delay convalescence.

Seventh, in one case I found the scar remain painful and tender for many weeks after the operation although there had been no suppuration or other hindrance to recovery. To lessen dragging on the adhesion I inserted a Hodge's pessary which the patient wore for three months. At the end of that time all pain and tenderness had gone, the pessary was removed, and the patient remained perfectly well. I have seen the same thing mentioned by others.

Eighth, the possible dangers incident to subsequent pregnancy and labour. This requires careful consideration. Fortunately we

have data for forming a judgment in an excellent paper laboriously compiled by Dr. Russell Andrews. In that paper he has collected and analysed 395 cases of pregnancy and labour following ventral fixation of the uterus, a larger number than has been collected by any previous investigator. A few more have been published since in a paper by Seegert.<sup>4</sup>

The first thing to be remarked is that, in the great majority even of these cases, labour was normal. I say even of these, because Andrews remarks that many of them were published because they were instances of successful obstetric operations and therefore interesting cases.

Abortion occurred in 9 per cent. Now the average frequency of abortion as compared with labour at term is as one to five, or 20 per cent. If these figures represent the usual result we must conclude that ventral fixation prevents abortion rather than favours it. It is clear that the operation does not cause abortion. In 9 cases labour came on prematurely, a number so small that we can say that ventral fixation does not cause premature labour. In 12 cases there was some trouble—pain or functional disturbance—during pregnancy. The number is small, and when we remember that a considerable proportion of the patients in whom displacements give such trouble that operations are demanded are neurasthenic, it is not surprising to find some of them still complaining of pain. The fact that only twelve of them did so shows that pain in pregnancy is not an effect of ventral fixation.

Andrews finds that according to published reports of cases high position of the cervix is the most common cause of difficulty in labour after ventral fixation. This difficulty was met with in 22 cases out of 395, a small number after all, only 5.5 per cent. But when we look into these cases, some of them are very hard to understand. In one of them the difficulty clearly was only in the mind of the accoucheur, for while he was getting ready to perform Cæsarean section the patient was delivered naturally. There are three in which the *os uteri* is said to have been opposite the first or second lumbar vertebra; that is near the middle of the kidneys and the diaphragm. Without the records of these cases I think one would have said that it was impossible so to fix the uterus that the cervix should be as high as this. In another case the cervix is said to have been so high that Champetier's bag could not be inserted, but the *os uteri* was manually dilated. It is not clear to me why it was necessary to dilate the cervix at all, and I cannot understand a condition in which the operator could get his hand in, but not Champetier's bag.



When I read these records I cannot help being reminded of cases in which the deviation from the normal position of the body and the neck of the womb is much greater than that produced by ventral fixation, viz., cases of retroflexion of the gravid uterus persisting to full term. Many of these cases have ended fatally in consequence of the doctor's endeavours to effect in some artificial way the delivery which he imagined could not take place naturally, while in those that have been let alone natural delivery has always taken place. When I read these cases in which dilatation of the cervix, turning, or Cæsarean section was done because the cervix was high up and it was assumed that therefore it would not dilate, I cannot help coming to the opinion that in some of them the only cause for interference was that the accoucheur was in a hurry. I cannot understand why tying up the fundus should prevent dilatation of the cervix. It may prevent or make difficult the engagement of the head in the brim, but the dilatation of the cervix depends not on this.

The cases collected by Andrews include ten transverse presentations. According to the average frequency there should have been two. If the cervix is so much displaced as to hinder the engagement of the head in the brim, a transverse presentation is a probable result, and an increased frequency of transverse presentations is thus explicable.

The most serious point in Andrews's collection of cases is that three ruptures of the uterus occurred. In one of these, no fewer than 14 stitches had been put in, so the fixing must have been extensive. In another, intra-abdominal shortening of the round ligaments had also been done. These three ruptures of the uterus may be only a fortuitous sequel, but it is also possible that a too extensive fixation, by preventing regular expansion of the uterus, may make it more liable to give way at a part on which undue tension is thrown.

Andrews's conclusion is that broad and dense adhesions are those that give trouble, and that there is less likelihood of trouble if the anterior wall is the part fixed. I think we should rather say the anterior part of the fundus. These conclusions seem to me in harmony with the evidence.

In brief, my conclusions are these:—That ventral fixation is the best mode of relieving symptoms caused by retroversion or retroflexion of the uterus, when the result of mechanical support is not satisfactory. That, combined with elytrorrhaphy but not without it, ventral fixation is an efficient treatment of prolapse. That if the operation is properly performed subsequent difficulty in labour need not be feared.

By "properly performed" I mean that the anterior half of the *fundus uteri* is stitched to the muscle about halfway between the *symphysis pubis* and the umbilicus. I see no advantage in trying to pull the uterus up to the umbilicus, or tying it down immediately above the pubes, or sewing its whole anterior surface to the abdominal wall. Most persons who disapprove of the operation appear to me to be influenced by the observation of cases in which the operation has been done for the relief of neurasthenic symptoms, and has therefore been a failure.

1. *Zeits. für Geburts. und Gynäkol.* Bd. lv.
2. *Monats. für Geburts. und Gynäkol.* Bd. xxi., pp. 754 and 777.
3. Seegert. *Zeits. für Geburts. und Gynäkol.* Bd. lv.
4. *Zeits. für Geburts. und Gynäkol.* Bd. lv.