THE FIELD FOR PESSARY TREATMENT IN RETROVERSION AND PROLAPSE.*

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(The speaker used a large number of wall charts and diagrams as text for a practical talk. Therefore the following is only a synopsis of the matter presented, which will appear in full later.)

To be avoided:

A. The office putterer who gives long and futile treatment to cases only curable by surgery.

B. The surgeon who sees only operation as the remedy for displacement and prolapse.

To be let alone:

1. Retroversions—many.
2. Prolapses—none.

Retroversions best let alone—

Those without symptoms or complication;

Those merely part of a general enteroptosis;

Those whose symptoms are merely part of neurasthenic sensitiveness.

Requiring pessary:

1. Retroversion in early pregnancy (every patient needs to be examined: worn three months).
2. Retroversion in the post-partum months (present in one-fifth the cases).
3. Retroversion between pregnancies while waiting until child-bearing is past.
4. Retroversion in cases of relatively short duration.
5. Retroversion in bad surgical risks.
6. Retroversion in extreme neurasthenia.
7. Retroversion in patients who cannot find time for operation.
8. Retroversion in patients waiting for operation.
9. After retroversion operation.
10. Prolapse in aged women.
11. Prolapse in bad surgical risks.
12. Prolapse before operation, to reduce edema and heal ulcers.
13. Prolapse in waiting for operation.

Calling for trial of pessary:

1. Retroversion with symptoms but no complications; e. g., dysmenorrhea and backache marked, but without tears or tumor.
2. Retroversion in some neurotics as test.
3. Retroversion to test whether symptoms are due to the retroversion.
4. Retroversion in some borderline cases.
5. Retroversion where pessary is not feasible—to convince patient.
6. Prolapse of the uterus alone, of slight degree, easily held.

Contraindications:

1. Lack of skill in use of pessaries.
2. Lack of opportunities to watch patient with pessary not self-removable.
3. Any degree of prolapse of bladder needs operation.
4. Inability on the part of skill to place pessary that will hold uterus in place after fair trial.
5. Persistent nervous disturbances after office treatments.
6. Most young virgins.
7. Some acute-angled retroflexions.
8. Solid adhesions.

Selection of pessary:

1. By measurement of vagina.
2. By experiments with various forms and sizes, and standing, corseted.
3. Soft rubber only—a, for trial or b, for self-treatment by nightly removal.
4. Hard rubber or equivalent otherwise.
5. Small and medium sizes (3 inches and under).
6. Gradual reduction in size.
7. For nightly removal in prolapse, circle; or ball with handle; or Hodge with scant "S" curve.
8. Few forms, few sizes needed.

Watching pessary:

1. Printed directions for details of bi-weekly douche and for regular return to office.
2. Weekly examination at first—monthly or bi-monthly later.
3. Inspection for chafing or ulceration of vagina, or crusting of pessary.
4. Entry on diary or tab on history to flag pessary cases for recall to office.
5. Test by removal after three or six months.

New points:

1. Written diagnosis given, with outlook stated.
2. Written or printed directions.
3. Automatic index for follow-up.
4. Tracing of pessary on history.
5. Examinations standing, corseted.
6. Forms for nightly self-removal in prolapse.
7. Methods of training surgeons and practitioners.

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Discussion.

DR. J. RIDDLE GOFFE, New York City: The usefulness and the definite limitations of the pessary in the treatment of retroversion and prolapse has been very clearly and convincingly presented by Dr. Dickinson. In my mind and in my practice the pessary has a definite place in the treatment of these conditions, but, speaking broadly, it is only a *temporary device*, to be discarded and supplanted by operative procedure when the time and place serve. Age is rarely a contra-indication for surgical procedure in the woman who is able to be upon her feet. I find that old women stand vaginal operations surprisingly well, and the age of women in the sixties or seventies, in itself, does not forbid the surgical procedure.

Coming now to Dr. Vineberg's paper, I have had a very limited experience with the operation described, and then more for the purpose of testing it out than because of its appeal to me as a rational and desirable operation. I am a great stickler for following Nature, in her arrangement and physiological functions, in dealing with all human organs and indeed with every part of the body. In the completion of all operations the fundamental principle and guide is *Nature's plan*. Why has Nature arranged and placed organs as she has in their relation and juxtaposition to each other? What physiological purpose has been accomplished thereby? For the operator, that is the pattern in accordance with which he must do his work and complete his operation. It is not possible always to follow exactly Nature's arrangement but when possible it should be done.

Now this operation of Dr. Vineberg's comes into direct competition with supravaginal hysterectomy. To my mind there is no question about the superiority of the latter. In the completion of the operation the normal relation of parts is restored and the physiological functions of the ligaments and the bladder maintained. The accepted method of completing the operation of supravaginal hysterectomy leaves the stump or the cervix in normal position, covers it with a peritoneal flap that gives it the appearance and contour of an infantile or atrophied uterus, attaches the ligaments, that have been severed, to this little uterus to give it support, and, if a cystocele has complicated the enlargement and fibrosis of the uterus, it can be easily corrected by dissecting off the bladder to a desired extent from the cervix and vagina and stitching the trigone of the bladder to the cervical stump at whatever level the situation may demand. Of course if a rectocele complicates the situation a further special procedure is necessary in the repair, by the accepted muscle operation, of the pelvic floor. When there are no complications this is the most straight-forward, simple and satisfactory operation in the whole range of gynecological surgery. Its absolute recovery is as near 100 per cent as any *simple* operation has attained. Its results are most satisfactory to the patient and are permanent. The parts are restored to their normal positions in the pelvis and Nature's plan, in subsequent physiological function of the remaining parts, is followed almost to the letter.

Coming to Dr. Frank's paper the remarks already made would seem to apply with equal force. The question is, is there an operation that will accomplish to the same or even a greater degree all the results that he claims for his operation, and by following Nature's plan, commend itself more to our consideration?

In dealing with these cases of procidentia complicated by rectocele and cystocele is there not something more to be considered beyond simply tucking these organs into the body and sewing them in there like so many potatoes in a bag? That is not Nature's method. Observation and experience have demonstrated that any foreign body, and that is what the uterus becomes when placed as a pad beneath the bladder resting for its support upon what is beneath it sooner or later thins out the tissue and robs it of its sustaining power. This is true of pessaries of all kinds, especially large rubber rings or ball supports either solid or inflated, which were at one time in vogue for the relief of prolapsus. The uterus when fastened beneath the bladder is not in itself a support further than it blocks up the way and thus acts as a foreign body, *unless* its ligaments have been shortened sufficiently to give it its required support. As a matter of fact in some of these cases of inter-position the ligaments have not been short enough to retain the uterus and the whole mass, uterus, bladder, and rectum, has been extruded through the vulva. At a recent operation for inter-position of the uterus of which I was a witness, after the uterus had been turned down the constant tendency was for it to slip out through the vulva, and the operator had the greatest difficulty to keep it in while he stitched together the vaginal wall in front. Question: Did the uterus hold up the vaginal wall or the vaginal wall the uterus? If the latter why not eliminate the uterus and simply use the vaginal wall to support the bladder?

The point of the argument is that Nature does not keep these organs inside the body simply by blocking the way out through the natural exits, but by controlling and directing intra-abdominal pressure. The importance of this deflecting plane of tissue represented by the uterus and its broad ligaments in controlling and deflecting intra-abdominal pressure cannot be over estimated. By the resilience of its ligaments and their muscular contractions this force is reflected back into the axis of the pelvis. The nearer, then, we can come to the normal arrangement of the uterus, the bladder and the rectum in the pelvis the more

perfectly will the important function of the uterus and broad ligaments as a deflecting plane control the pressure and the organs ride more comfortably in their normal positions. That is the principle on which the operation which I have devised and employ rests. All cases of procidentia with rectocele and cystocele are divided into two classes, viz., cases in which the patients are in the childbearing period and those which are at or have passed the menopause. In the first class the uterus is retained. After attending to any minor lesions the uterus is restored to its normal position by shortening the round ligaments, through the vagina, and in extreme cases the utero sacrals as well. The trigone of the bladder is then spread out upon and made fast to the anterior face of the uterus and broad ligaments where it originally belonged. The bladder is carried up sufficiently high to overcome all sagging, and, by stitches passed through the upper border of the trigone, it is permanently fixed. The vaginal mucous membrane with its fascia is then cut away sufficiently to make it hug tightly the base of the bladder and the incision stitched along the median line. The floor of the pelvis is then restored by the muscle operation and the vagina packed with gauze.

In the second class of cases the uterus is removed, after which the broad ligaments are stitched together, making them draw taut across the pelvis. In this position they take the place of the original deflecting plane composed of the uterus and broad ligaments. Upon the anterior face of this newly constructed plane of tissue the bladder is spread out and stitched there, as previously described, in the position that Nature originally placed it. The vaginal wall is then cut away and made to fit the new situation as before. In cases having extremely large rectocele the posterior vaginal wall is incised along the median line and the rectum laid bare. It is then plicated by a chromic catgut suture passed up and down parallel with its axis and running across the rectum from side to side. Sometimes two such plications are made. The plicating stitch is firmly anchored at either side in the strong rectal fascia. The vaginal wall is then closed over it and the muscle operation on the perineum is performed.

In my hands this is a much simpler operation than the inter-position operation in which the central part of the uterus is cut away as in the Vineberg procedure. The results are most satisfactory both to the patient and myself as is evidenced by the series of cases which I reported in 1912. In the cases composing this series careful description was given of each case, the details of the operation and the results. To my mind it restores the parts to a more normal position and function, and justifies itself by therein following Nature's plan both anatomically and physiologically.

DR. SAMUEL W. BANDLER, New York City: It is worth while coming a very long distance to head Dr. Dickinson's plea for the use of the pessary. I simply wish to emphasize two or three of the factors which he has brought out, points which I myself have followed with the greatest satisfaction.

In the first place, and I mention this first because I think it is a point that has been very much neglected, every post-partum case is examined by me on the twelfth to the fourteenth day, again a week or two later, and again two or three weeks later, up to three to six months. On the first appearance of any retroversion, needless to say, a pessary, usually a Smith-Hodge pessary, is introduced. I believe this procedure is a very valuable thing, and I have followed it for a number of years.

In the next place, I must say that the pessary is a very satisfactory diagnostic factor. If a patient comes to you complaining of pelvic disease and at the same time you find a retroversion or a retroflexion, if you can place that uterus into normal position by any form of pessary and let that patient wear that pessary for several weeks and if then she comes to you and says, "Doctor, all my symptoms have disappeared," you have made the diagnosis that her retroversion or retroflexion was the cause of her annoyance, and then you can say to her, "My dear lady, you have the choice of wearing this pessary for the next twenty-five or thirty years or you have the opportunity of having a suitable operation done and wear no pessary."

As regards the operation for prolapse of the uterus, the point I wish to bring out is that in Dr. Frank's pictures and in the pictures of Dr. Vineberg, a longitudinal incision was made in the anterior vaginal wall. I believe that for technical surgical reasons one ought to make a transverse incision and then a longitudinal incision. In other words an inverted T, because it brings in the point which Dr. Frank brought out beautifully in his pictures, and it brings out the points that others have mentioned when they said that the broad ligaments should be fixed in front of the cervix. If you make a transverse incision and then a longitudinal, you can get a tremendous, a huge separation of the bladder from all contact with every structure practically speaking but the ureters. You simply leave it hanging by the ureters. Then you may resect as much of this anterior vaginal wall as you will, and when you sew, after the high amputation of the cervix, which is the important part, the denuded vaginal mucosa around the os from the posterior area to the front as you go around on either side, you catch the lower part of the broad ligaments, you catch the edges of this pubo-vesical ligament and they are fastened in front, which lifts the cervix high up and far back. After all, no matter how

you fasten the fundus in front by the Dührssen or other operations, unless your cervix is put high up and far back, your cervix descends. With a properly done Dührssen no cystocele can ever recur, but the uterus can descend. Therefore, the important part is to fix these elastic ligaments and elastic tissue that support the bladder in front of the cervix.

DR. HIRAM N. VINEBERG, New York City: I thank you very much for the discussion on pessary treatment and for saving me from some criticism. It shows the tendency of the time, that we are going from perhaps doing too much surgery to doing more conservative work. I am fully in accord with Dr. Dickinson in what he has said in the matter, and it is a method that I have been practicing for years and thought perhaps I was old-fashioned. I am very glad to find that it is coming into fashion again.

I am also pleased to see that Dr. Frank has followed in his description the method of suture that I have been using. It never appealed to me at all to try to isolate the levator ani muscles separately. I have always passed my sutures in such a manner that the muscles, the fascia, just as Dr. Frank has described here, are held together.

I am not surprised, however, that Dr. Frank has had difficulty in teaching the house staff if he has tried to teach them all the anatomy that he has shown us here today, because that is somewhat complicated as are the anatomy and the pictures of all plastic operations.

In reference to what Dr. Goffe says about the abdominal hysterectomy, I think, if I got the meaning of his remarks, that you could get a better result by doing this operation through a ventral incision and stitching up the cervix through the abdominal wall.

Now, it just happened that when I began to do this operation, a case of this kind presented itself to me at the hospital in which a woman had been operated on three months before by that method and the cervix came out completely through the vulva. In that case, I performed the operation just as I have described here and the woman has been under observation ever since and there has been no recurrence of the prolapsus.

One word more about the transverse incision—I used to do that when I did the work formerly, about twenty years ago, but have given it up as entirely unnecessary. When you make your longitudinal incision and you separate the vaginal wall from the bladder, and you get all the space that you need and as much as you can get from a transverse incision, and you get a nicer union and coaptation afterwards.

DR. ROBERT T. FRANK, New York City: Nature might have improved matters very much if it had made the pelvis completely bony and would have thus simplified obstetrics by forcing us to make all deliveries through Cæsarean section, but we are dealing with actualities and not with theories, and therefore even the complicated anatomy that we encounter and which I have been reproached for showing must be considered.

We use a great many terms here in very loose fashion. Dr. Goffe and others speak of ligaments. What is a ligament? Here is the cervix and that is the center of anything that we have to work with. The cervix is held in equilibrium by connective tissue. To borrow the familiar example of an automobile, the cervix is held in position by springs. These springs are the connective tissue forming the sacro-uterine ligaments, the cardinal ligaments and the pubo-cervical ligaments. Besides these springs that we have to deal with, there is a shock-absorber and that is the levator ani and its fascia.

In a normal individual with good, strong ligaments—I am using now the conventional term for the cardinal, etc., but it is really connective tissue—the cervix, I believe, would be kept in place if you paralyzed or temporarily cut the levator, but after childbirth, when these ligaments have been traumatized and have been torn and have been stretched, then the levator has to do more work than it is ordinarily called upon to do.

Now, we can't very satisfactorily shorten the cardinal ligament or the sacro-uterines or the pubo-cervical. Therefore, I say that our main reliance when possible must be placed upon makeshifts such as ventrofixation in fastening up the cervix or the uterus or upon interposition if the uterus is fitted into the levator hiatus.

The reason that the inter-position operation is so popular is that the inter-position operation, although it is a deforming one, is applicable in a great many conditions in which the various other operations are not applicable or in which they have to be carefully selected. In other words, given a surgeon of only moderate experience, he can always fall back on the inter-position operation if he is willing to sterilize the woman, because it really does work in a great many cases.

What I am advocating is an operation which is less deforming and which can be used even during the childbearing period and which can be used by surgeons of even less experience. This operation—and when I say "this operation," it is simply a technique, there is nothing absolutely original in the operation, for it is a modification of many other operations, can be used under as greatly varying conditions as inter-position with as good or better results. You have heard various speakers today who have claimed that they have been doing such operations in one form or the other for a number of years, and that is certainly true. I simply wanted to give you a general outline of a reliable standardized technique.

DR. RICHARD R. SMITH, Grand Rapids: I would endorse most heartily all that Dr. Dickinson has said in regard to the indications for the use of the pessary and for operations upon cases of retroversion. I would especially emphasize what he has said in regard to not operating upon the uncomplicated cases. I do not believe in employing local treatment in any form in the uncomplicated cases of retroversion found in young women before childbearing. The pelvic symptoms of such patients are almost invariably neurotic, and the less attention we pay to their pelvis, the better.

Now, in regard to the prolapse cases, I think it is well to bear in mind one thing, that no woman during the childbearing age should have any operation done, which can in any way possibly interfere with childbearing. To the woman, the matter of childbearing is far more important than the little discomfort she may have from an uterine prolapse. After she is through with childbearing, then we may well consider operation. Of all the operations which I have done for prolapse, there is none that has given patients such thorough relief as the Watkins' operation. I cannot speak too highly of it.

DR. ROBERT L. DICKINSON, Brooklyn: Interposition is of extreme value in the little old uterus past the menopause, and particularly where the bladder isn't pulled completely away from its anterior (pubic) attachments. With a bladder all out in the world, including the urethra (as compared with some of these other cases, as shown in the charts from Halban-Tandler, where the bladder is still hitched in place), there will occur prolapses after inter-position.

As to whether we shall remove the uterus, as Goffe suggests, or shall take a piece out of it, I have faithfully tried what Dr. Watkins and Dr. Vineberg advised—amputating the cervix and then taking out a piece of the body of the uterus. It is long and bloody and troublesome no end. Therefore, I have gone back, after trying it some eight or nine times, to doing Dr. Goffe's operation. In the big uterus, the chronically inflamed uterus, the fibroid uterus, and so many of these cases where the moderately enlarged uterus would better come out, I do the vaginal hysterectomy of Goffe with great satisfaction (and I think my service has run this up beyond three figures). We sew the broad ligaments together and fasten the bladder to that bridge. The whole merit of the Goffe operation of vaginal hysterectomy, in cases of bladder prolapse, is that, though it is long and fussy, it does give a first class bridge across the pelvis to which to fasten the bladder. The bowel is untouched. The patient is unshocked.

Dr. Frank enters a protest that should be voiced against dissecting the levators. It has been a fad. Levator apposition has its valuable place in high rectoceles and a few bad injuries, but we should all, even in these cases, restrict ourselves to seizing the levator mass and hitching those two bunches together. Even then have a care: Beware of a tense and painful bridge.

I am greatly pleased with the reception given to the discussion of so old a subject as the pessary.

DR. THOMAS J. WATKINS, Chicago: It seems to me that Dr. Dickinson's paper is a very timely one, that we are very much in need of reviewing a good deal of the old work and bringing it up to modern ideas, which Dr. Dickinson has done very efficiently.

It would seem to me to be highly desirable if Dr. Dickinson would publish a monograph on the pessary. The pessary is tending to go out of use on account of its abuse. The pessary, I believe, is a very important instrument with limitation. Its use requires a good deal of experience and knowledge of the mechanics of the pelvis and the pessary.

As regards the prolapse operation, I think Dr. Dickinson mentioned a very important thing in regard to cystocele and rectocele, namely—that they are conditions that invariably get worse. They become much worse after the menopause. Rectocele and cystocele, consequently, should be repaired if possible before they become extensive as then less operative work is needed and better results are obtained.

After an experience of eighteen years with the "transposition operation," I feel that the more cases that I have done and the more I have studied the subject, the greater number of problems I encounter. There is no one operation that is adaptable for all cases of prolapse of the uterus and bladder. The operative procedure should be modified to suit the case.

After the transposition operation, there is danger of the fundus protruding, as mentioned in Dr. Goffe's discussion. Its occurrence is either an error in the selection of case or in the technique.

When the uterus is very large or broad ligaments extensively elongated, the modified operation should be done of removing a portion of the uterus and of shortening the broad ligaments by severing portions from the cervix and uniting the cut ends in front of the cervix. We prefer this to a hysterectomy as the technique is simpler. If one builds a firm floor for the bladder, and in case of infection which is very prone to occur in extensive vaginal operations, the final result with the modified transposition operation is almost certain to be excellent; whereas, with the other, there is great danger of recurrence of the cystocele. In case of recurrence of cystocele after hysterectomy nothing can be done for relief, except obliteration of the entire vaginal canal.

It is high time to object to the frequent statements made relative to imitation of Nature in the correction of pelvic lesions. An operation done

for prolapse after the menopause should be an improvement upon Nature, as Nature was handicapped in the development of the female pelvis as a support, because she had to provide for pregnancy and labor. If Nature had not been thus handicapped, she would have given woman efficient pelvic support of the male type of pelvis. If Nature had not been thus handicapped, she would have probably placed the bladder on the posterior surface of the uterus.

DR. HARRY S. CROSSEN, St. Louis: I was particularly pleased to see the pessary so well studied and so clearly demonstrated in the different cases by Dr. Dickinson. I heartily second Dr. Watkins' suggestion that Dr. Dickinson give us in a monograph the results of his careful study. There is just one class that I hoped Dr. Dickinson would touch on which I believe he did not, and that is the class of cases in which there is no satisfactory shelf left. The ball pessary slips out within a half hour perhaps or as soon as the patient puts a little strain on it. The ordinary pessaries, the Smith and the other forms, will not stay in at all. That class of cases has troubled me considerably, and I have been using in recent years with a great deal of satisfaction the Gehrung Pessary, otherwise known as the double horseshoe pessary. I hope that when Dr. Dickinson brings out his monograph he will describe that pessary so that it will get into the hands of the general practitioner and will be used. I believe when it is understood it will come more and more into general use for that particular class of cases. The heel of the horseshoe on each side takes hold far out on the side of the pelvis, even in those cases where there is almost no shelf left or a very small shelf.

Now, another point that the doctor made, and I think it applies particularly to this form of pessary, and that is the experience that is gotten in dispensary work. You can't learn how to use the Gehrung pessary from descriptions; it must come from actual use under proper instruction. When you get that, it is very easy. That is one form of pessary that I find satisfactory to leave in for a long time without disturbing it—of course, having the patient come at regular intervals. As a matter of fact, in watching these patients, I find that they go for many months often without having to remove the pessary.

DR. J. WESLEY BOVÉE, Washington, D. C.: I think this is a matter in which the farther we get away from any particular operation or any particular form of treatment, the safer we are. Those who are so addicted to one particular operation find they have to use pessaries after operation, as some distinguished surgeons have told me they have done—not as a precautionary measure, but months afterwards for reputation-savers. I think the best time to use the pessaries is before operation, and I am quite in accord with what Dr. Dickinson said. A large proportion of these cases will be successfully treated by the use of properly fitting pessaries, and no pessary is properly used unless it does fit well, and under such conditions, it should never give symptoms. The pessary that gives any pain or any discomfort to the patient should be removed; it is not the proper one. This is a question that requires a great deal of attention. We should teach our students very thoroughly, I think, on the subject of pessaries, particularly the introduction of pessaries. Every student, you know, wants to operate. Your internes in your hospitals, as has been said, are not easily taught plastic surgery. No, it is the wrong part of the patient. They want to be inside the abdomen, and they are willing to trim their feet to get them small enough to get them inside between the ensiform and the pubes, but they must get there. As I say, the use of the pessary is very advantageous.

I agree with Dr. Dickinson that the soft pessary is to be condemned. The hard rubber pessary is the best we have at present so far as I know. I haven't had experience with the glass pessary, but in the hard rubber pessary, I think, we probably have the best.

I must say a word about the Hodge pessary. I haven't heard very much said about it, but in my judgment the Hodge is the best type we have, and, next to the Hodge is the Smith modification of the Hodge, which is not applicable to such a large variety of cases. A great many think they are using a Smith pessary when they are using a Hodge, and vice versa. There will be traumatic cases, post-perineal cases, as Dr. Dickinson says, in which the pessary cannot be expected to do much for the patient.

There is another class of cases, those of anatomical developmental anomalies, in which we have an improper leverage of the ligaments on the uterus, and in which there will be a retroversion; so long as she has those organs, she will have these displacements unless there is a proper operation done.

These various procedures are all based upon a proper readjustment of the fascia, and any operation, unless it be based upon that principle, will be a failure.

DR. EDWARD E. MONTGOMERY, of Philadelphia: I heartily coincide with what Dr. Watkins has said as to the importance of adapting the operation to the patient rather than adapting the patient to some particular operation which we have instituted. There is no operation that will be applicable to every patient so that the procedure must consist of what is best for the particular individual under consideration.

In regard to the operation suggested by Dr. Vineberg, there are cases of prolapse where the cervix is more or less diseased as a result of the protrusions from the vagina where great irritation has caused ulcers and sores. In these cases

there is a certain amount of degeneration of the cervical glands and more or less danger exists from the retention of such structures. I have seen a number of instances in which it was necessary to remove the cervix where supra-vaginal hysterectomy had been done because of the occurrence of cancer in structures which remained. The operation which I have employed in these cases in which there is considerable prolapse and protrusion is vaginal hysterectomy and the utilization of the broad ligaments for the maintenance and support of the bladder by crossing the ligaments beneath the protruded structures which are sutured to their upper surface. After this suturing has taken place the anterior wall of the vagina is closed and a good strong support of the pelvic floor is formed by the recto-vaginal interposition of the levator ani muscles brings these well together in front of the intestines, making sure that no subsequent diastasis of these muscles or protrusion of the rectum through the vagina can take place.

Occasionally in such cases there is seen an individual who is desirous of sustaining the size of waistline with which she started in life when there is protrusion of the viscera through the vagina, or in other words, a vaginal hernia. This is particularly likely to occur under great pressure as the contents of the abdomen must find some place for their accommodation. In these cases the peritoneum should be pushed off in Douglas' pouch and the tissues brought together below it to make sure that no protrusion or hernia takes place subsequently.

Dr. LeRoy Broun, New York City: These three excellent papers cover such a wide field that it is very hard to take them up individually. The problem that Dr. Vineberg presents to us is how to deal with large uteri that cannot be interposed. He advocates the amputation of the fundus and fixing the stump under the bladder.

In such uteri the removal of a large wedge from the fundus to the internal os of the uterus is recognized as a good procedure. This brings the uterus to such a size as it will not protrude from the vagina. Dr. Vineberg has modified this operation in making the uterus smaller by taking it off antro-posteriorially, making it shorter instead of making it narrower. He also, if I understand correctly, makes a point of leaving the cervix, *i. e.*, not amputating the cervix. When the stump of the uterus is fixed under the bladder and the cervix is allowed to remain, its posterior lip is pushed on by the posterior wall of the vagina as a fulcrum and will eventually tend to cause the cervix to project at the vulval orifice. This is what at times occurs in the interposition operations where the cervix is left and the uterus interposed; and Dr. Vineberg mentions this has occurred in some of the cases on whom he has done the operation he proposes. My custom is always to amputate the cervix and I think it should be done also in the operations proposed by Dr. Vineberg.

As to the limitations of Dr. Vineberg's operation I would feel inclined to limit it to partial prolapse and not use such an operation in a complete procidentia. In complete procidentia I feel that the operation that gives the best results in my hands is that of complete hysterectomy, sewing together the broad ligament and putting the bladder on top.

As for Dr. Frank's paper, I have had the opportunity of examining carefully the excellent models that he has brought and which he has not had the opportunity to show you. These models are the result of his dissections and they bring out one thing admirably, the importance when repairing the posterior vaginal wall of not attempting to isolate the levator ani muscle? He shows the triangular ligaments resting against these muscles. In putting in your sutures through the triangular ligament and running the sutures well out to the side, the levati and fibres are firmly caught up and brought together. In this way a firmer and better perineum than from the levator ani alone is obtained. For several years I have discarded isolating the muscle itself, yet know that each deep suture grasps firmly the fibers of this muscle underlying the ligaments.

Your limit of time prevents my speaking of Dr. Dickinson's admirable presentation of the subject of pessaries.