

EMMET, (T.A.)

A Study of the Causes and
Treatment of Uterine
Displacements.

BY
THOMAS ADDIS EMMET, M. D.,
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A STUDY OF THE CAUSES AND TREATMENT OF UTERINE DISPLACEMENTS.

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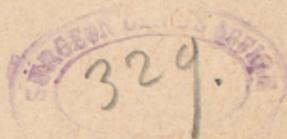
It is with some hesitation that I enter upon the consideration of this subject of uterine displacements from the fact that the medical mind has been trained so thoroughly, and for so long in one line of thought, that it may even seem a work of supererogation, if not of presumption, to criticise what has been accepted so absolutely.

Yet a long experience, and one not wanting in close observation, has been of little avail if it be true that the version of the uterus is the disease, and if a simple change in the extent of deviation be the remedy.

Moreover, if this experience has taught anything it is that the degree of prolapse below, or of elevation of the uterus above, a certain plane, causes the symptoms now usually attributed to version alone.

Years ago I pointed out what I then termed "the health line," one which varies in each individual; but so long as the uterus occupies it the circulation continues normal, and the veins empty themselves without over-distention.

If we examine a woman lying upon her back who has suffered from prolapse of the uterus, and where the pulsation of some branch of the circular artery can be distinctly felt, she appreciates a sense of relief, upon lifting the uterus, as soon as the "health line" has been reached. When the uterus is gently raised on the index-finger to this plane in the pelvis and is held in place for a few minutes, the pulsation gradually ceases.



On the other hand, if we go beyond this point we produce a disturbance, and are all familiar with the prompt relief obtained after the removal of a pessary which, from the length of its posterior curve, had lifted the uterus too high and above its natural plane in the pelvis.

Anteversión of the uterus is certainly not an abnormal position, for it is found in the fetus and often throughout life without the slightest connection with any diseased condition. And retroversion, to a very marked degree, is frequently detected, through accident, where not the least inconvenience had ever been experienced. Many years ago I learned from practice, and have since taught, that a retroversion pessary, having a somewhat longer posterior curve than is generally used, was the most reliable means for relieving the symptoms associated with anteversion of the uterus, provided the displacement had not been caused by inflammation and shortening of the utero-sacral ligaments. This application of the instrument has the effect of increasing the degree of version, although such is not the object, but the purpose is simply to lift the cervix, with more or less of the body, and without reference to the direction of the axis of the organ. In the treatment of retroversion of the uterus we have all noticed in certain cases, after the inflammatory condition of the surrounding tissues has subsided, how much relief is obtained by simply lifting the cervix to a higher plane in the pelvis, and this is gained notwithstanding the version may be exaggerated by the change. We must, therefore, seek for some other condition which may co-exist with displacements of the uterus, if we would find the true cause of suffering.

Let us consider for a moment some of the causes of uterine displacements.

Dr. Sims pointed out the fact that the presence of a small fibroid, near the vaginal junction in front, would retrovert the uterus, and a like condition behind would throw it forward. We are all familiar with the consequences due to increased weight of the uterus following some injury after

childbirth—from partial thickening and from new growths—in causing displacements through the action of gravity. Therefore, it would be of little profit were we to consider this part of the subject, which is thoroughly understood. I wish to consider more particularly the extraneous causes of displacements due to pelvic inflammations, for we have a large class of cases coming under this head which has not received the attention due to so important a subject.

The only fixed and unyielding point in the pelvis is situated at the neck of the bladder where the sub-pubic ligament binds down the urethra. When traction from any cause is exerted in line with this point, irritation, or a desire to empty the bladder, as a symptom, is excited. This traction is often the consequence of a pelvic inflammation where opposing peritoneal surfaces have become adherent. When adhesions have formed, the line is necessarily shortened, so that the uterus is, according to circumstances, then either raised or depressed in the pelvis. From the same cause it may be either extremely anteverted or retroverted, but traction will always be made directly upon the neck of the bladder as the fixed point, and a desire to empty it will be the symptom as I have stated. The position of the uterus consequently bears a close relation to the locality and extent of the peritonitis, so that the fundus will be thrown forward or backward, and with some degree of prolapse; or else an undue elevation of the whole organ in the pelvis will be the result.

A prolapse is the more usual in consequence of the increased weight of the uterus from an obstructed circulation of the blood through the connective tissue. This tissue is, as a rule, the first involved in a pelvic inflammation, and the degree of displacement is generally in proportion to the extent of the previous cellulitis. Let me repeat that the uterus may be either drawn up in the pelvis or prolapsed, from an inflammation which has been confined chiefly to the peritoneum, and the result is likewise influenced by the position and extent of the inflammation; but a version, which is not the direct result of a mechanical cause, and due either to

some injury or to new growths, is always the consequence of a pelvic peritonitis.

The Fallopian tube is inserted on each side of the uterine fundus, at a somewhat higher point than the attachment of the broad ligament to the side of the pelvis, and this circumstance has an important bearing, as I shall show. An inflammation confined chiefly to the peritoneum covering the tube would have the effect of shortening the line, on forming an adhesion, and of depressing the uterus lower in the pelvis. On the other hand, if the inflammation had extended from below, through the connective tissue between the folds of the broad ligament to the peritoneum above, the uterus would be lifted in the pelvis in proportion as the peritoneum became involved and adhesions were formed above.

I had the honor of reading a paper before this body at its last meeting, in which I pointed out the fact that connective, or cellular, tissue does not readily, if ever, regain its integrity after having been subjected to inflammatory action, and that it either becomes absorbed or disintegrates into pus. I also described how nature repairs the injury and fills up the space which had been occupied by the diseased tissue, and this closing together was brought about by means of the elasticity of the neighboring connective tissue which has not been involved.

As soon as this is accomplished it becomes impossible by means of the finger to detect in the pelvis any indication of the old inflammatory attack, and the parts in time practically regain their integrity. I also pointed out the consequences of an extensive cellulitis within the folds of the broad ligament, and that the connective tissue here, having been destroyed, could not, from its isolated position, be again supplied. When the inflammation extends under these circumstances to the peritoneum, and the opposing surfaces forming Douglass's *cul-de-sac* become adherent, the uterus is necessarily lifted in the pelvis. Then, in proportion as the peritoneal sides of the broad ligament are separated, or flattened, and the vagina balloons out, will the side of the uterus be

drawn up and in near approximation to the Fallopian tube on the same side. It is thus that a lateral version of the uterus takes place as a permanent deformity, and not by shortening of the broad ligament, as is usually thought to be the condition.

On the other hand, when the connective tissue between the folds of the broad ligament has not been involved, adhesive inflammation between the peritoneal surfaces of Douglass's *cul-de-sac* will cause prolapse and retroversion of the uterus.

Where the inflammation has been confined chiefly to the peritoneal surfaces forming the utero-sacral ligaments, the uterus will become anteverted, and the cervix will be lifted in the pelvis in proportion to the extent of adhesion formed between the surfaces involved.

A local peritonitis low down on the anterior face of the broad ligament will retrovert the uterus by lifting the cervix, as a small fibroid similarly situated would do. But, where the inflammation has been more extended and has formed broader adhesions, the uterus becomes finally extremely anteverted and prolapsed in the pelvis.

With the backward displacement the fundus is found comparatively free, if the examination be made before any special treatment has been instituted, so that the displacement is easily corrected by the finger, and the uterus can be replaced with little pain. But, if the organ be then held in what is supposed to be its natural position, it will not be long before the operator will be able to detect a distinct pulsation in some neighboring vessel. This obstruction to the circulation has been caused by putting the adherent peritoneal surfaces and neighboring vessels on the stretch, by a change in the position of the uterus. If, with reference to the depth of the posterior *cul-de-sac*, a pessary be employed, as usually shaped, to prevent a recurrence of the version by lifting the cervix, and with a long lever filling the *cul-de-sac* but bent at rather a sharp angle, so as to come into close contact with the posterior wall of the uterus, it will not be long before the ne-

cessity for its removal will be urgent, and if the demand be heeded no great damage may be done. If under the same circumstances, but with a different idea as to the application, a pessary be employed to correct the version by keeping the cervix toward the hollow of the sacrum, the curve would then be a moderate one and made to project at some distance beyond the uterus. With this form of instrument the woman will almost always experience at first a sense of relief, as the traction on the neck of the bladder is removed by correcting the prolapse.

But on changing the position of the fundus the circulation above becomes likewise obstructed, as I have shown, from direct traction upon recently inflamed or adherent peritoneal surfaces. There will seem to be no urgent necessity for its removal at first, and the patient will be tempted to keep it in place notwithstanding strict orders to the contrary; but nothing can be more certain than that the result will be a fresh attack of peritonitis, in both instances, if the pessary be retained.

With the opposite condition, that of extreme anteversion, we can not correct the displacement, by means of any instrument to be used for the purpose, without making traction upon the shortened utero-sacral ligaments, and just in proportion as the fundus is raised will the damage be the greater. Were we to treat such a case by means of a retroversion pessary, having in view the correct principle of relieving the prolapse sufficiently to restore the circulation without reference to the version, an increase of inflammation must be the consequence from direct pressure upon the inflamed utero-sacral ligaments. And yet the only relief to be obtained must be through some means which will correct the prolapse sufficiently to restore the circulation.

When the uterus has been displaced in either direction, as a result of peritoneal inflammation situated on the anterior face of the broad ligaments, the consequences will be the same if any attempt be made to correct the version.

Where the inflammation has been limited to one side,

and this is more usual upon the left, it is equally impossible to devise any pessary which will not make direct pressure, and in time increase the difficulty by exciting a fresh attack of local peritonitis.

Upon the insertion of a pessary, the patient, in comparison to her previous condition, often experiences considerable relief, and the degree of tolerance shown by many to the pressure of the instrument is surprising, but the consequences are no less serious.

The question may be asked, "What is the general practitioner to do with such cases?"

My answer would be—if he is an honest man, and considers the future well-being of his patient—let such cases alone, so far as making any attempt to correct the displacement. If it be absolutely necessary to undertake some mode of treatment, let him confine his local interference strictly to the application of iodine, with one or more cotton and glycerine pads properly placed to give the needed support, and to the use of the hot-water vaginal injections. The experience of all who have had the opportunity of witnessing the results which are so common, from ignorance, and as often from a want of dexterity, will bear me out in the statement that the treatment of such cases should never be attempted outside of a hospital service, and it would never be attempted if the consequences were sufficiently understood.

That I may be able to point out clearly the principles of treatment, we must first consider briefly some peculiar features in the pelvic circulation of the female. In no other part of the body, as the result of disease, can so large an amount of blood be received within the same space, as in the female pelvis. As the veins are without valves, it is necessary that their course should be an extremely tortuous one to overcome the effect of gravity. Moreover, this provision is necessary that undue traction be not made upon the vessels with the change of position, and with the increasing bulk of the uterus depending upon gestation. I have observed that, when sufficient traction is made upon one of these veins to render its

tortuous course a straight one, its diameter becomes enlarged, and the whole vessel is distended with an increased quantity of blood.

Again, observation has pointed out the fact that, if we draw down a healthy uterus to a certain point near the floor of the pelvis, and hold it there, very soon the cervix and vaginal tissue become congested, and the dark color indicates an obstruction to the venous circulation. But let the traction be increased until a portion of the uterus projects from the vagina, and the tissues will then gradually become blanched in appearance.

A woman will therefore suffer greatly from the effects of increased weight of the uterus so long as it remains on the floor of the pelvis, but let the condition become one of complete procidentia and she will be relieved of all symptoms due to congestion.

It is therefore evident that, as soon as a woman suffers from a prolapse sufficient in extent to straighten out the convoluted course of the veins, they dilate rapidly, and with the increase in caliber they become receptacles of almost stagnant blood.

The arteries are not so readily acted upon, and their more unyielding walls protect them under a greater degree of traction. But, in response to the irritation attending the condition of prolapse, more blood flows to the parts, and the increased action of the arteries thus aids in producing the over-distended condition of the veins, and at a time when they have already lost the power of fully emptying themselves. If the prolapse should advance more to the vaginal outlet, a point will finally be reached when the traction will be exerted directly upon the arteries. This force, in elongating them, has the effect of diminishing their caliber, and just in proportion as this is accomplished will the quantity of blood be lessened and the veins become thus relieved of their over-distention.

Experience teaches this fact, that in an operation upon the cervix the loss of blood is greatly lessened by keeping

the uterus at the vaginal outlet, whereas it might be uncontrollable if the uterus were allowed to remain in its natural position.

We now reach a most important point in considering the close relation between the pelvic circulation and the surrounding fascia and connective tissue.

The connective tissue is as the trellis-work to the grape-vine, and the pelvic fascia gives support to the whole so long as the fascia and connective tissue are in a state of integrity. Not only will the proper support be given to the pelvic organs, but the circulation of blood will be kept under control by the elastic pressure and support of the connective tissue itself. This support to the blood-vessels is frequently lost as a result of injury attending childbirth, and to some degree it may be a consequence of peritoneal inflammation. A local peritonitis, in forming adhesions, may, as a consequence, exert so much traction in one direction as to impair the natural elasticity of the connective tissue elsewhere, and with the result of relaxing the necessary support to the blood-vessels in the neighborhood.

Some years have now elapsed since I first claimed that the symptoms attributed to the common injury at the vaginal outlet, termed a laceration of the perinæum, was not due to a rupture of the "perineal body," but to a separation of the fascia forming the sulcus on each side of the vagina. This fascia is in close relation with the connective tissue throughout the pelvis, and, just at the point where it is reflected over the muscles at the vaginal outlet, this separation takes place. The consequence is, that by this slackening up of the fascia, the muscles, which are the chief support to the sigmoid curve of the rectum, are drawn aside, and thus a rectocele is formed. But the most serious result is the loss or impaired support to all the pelvic vessels, for the reasons already pointed out.

In this connection I will cite the illustration which I have frequently used. I have claimed that, where the perineal body has been ruptured by a laceration through the sphincter ani and the recto-vaginal septum, there is no suffer-

ing from any symptom which can be attributed to prolapse, and the want of retentive power is the only difficulty. The pelvic circulation is not impaired in these cases, as the blood-vessels continue to be properly supported by the connective tissue.

This has resulted from the fact that the fascia, reflected on each side from the sulcus to the muscles at the vaginal outlet, could not be involved by a central tear, and only by a transverse one. It is thus proved that the symptoms which have been so long considered due to a laceration of the perineum are never present when the laceration of the perineal body has been the only injury.

No benefit is gained by any surgical procedure at the vaginal outlet, done for the repair of a so-called laceration of the perineum, unless the principle is recognized by the operator that the rectocele must be properly included, and, by so doing in a proper manner, the needed support to the blood-vessels can be again restored.

As the rectocele is disposed of, the slack is taken in. By drawing the recto-vaginal fold forward against the posterior face of the muscles at the vaginal outlet, the fascia is again caught up and thus made sufficiently taught throughout the pelvis to give the proper tension to the connective tissue which supports the vessels.

Any operative procedure which does not take in this slack fails to give relief and is worse than useless.

We will now briefly consider what is to be accomplished by the successful use of a pessary.

Many an operator has acquired the art of fitting a pessary which may do no harm but which does no good. The whole skill in the successful application of a pessary is to so construct it in size and shape that, while it relieves the prolapse, it will just dispose of the overstretch. Thus the needed support to the connective tissue will be restored, and it is only when this has been accomplished that the pelvic circulation can be kept within its proper limits and the patient be relieved.

A pessary, then, does not give relief by simply counter-acting version. Its effect is an indirect one, because, when properly fitted, it diminishes congestion, by correcting the prolapse and giving tone to the connective tissue of the pelvis.

If a uterus, free from peritoneal adhesion, be replaced and a sufficient support to the fascia be again brought into play, it will be then retained in position through aid of the natural elasticity of the surrounding tissues. This principle underlies all successful modes of treatment, where the ultimate result is gained by diminishing the size of the blood-vessels.

The knee and chest position, through the aid of atmospheric pressure, accomplishes this for the time. The weight of the water in the vaginal injection, when it is properly given, with the patient lying upon her back and with the hips elevated, acts, by a uniform pressure, in the same manner. But the effect is only a temporary one.

For years past I have employed, as my daily practice in treating some cases, a few pieces of cotton saturated with glycerine, placed as a crutch to lift the uterus, and thus relieve tension along some line shortened by inflammation. But I have never used more than was necessary to correct the degree of prolapse, and this was sufficient to take in the slack and obtain the necessary support to the vessels.

This mode of treatment has been recently advocated, but without a full recognition of the principle upon which it acts. If the cotton pledgets be applied with the patient in the knee and chest position, while the vagina is consequently fully dilated, and if the large quantity of cotton recommended be packed in, the practice is more likely to prove a source of irritation than of benefit.

If I have correctly stated the common causes of uterine displacements, it must become apparent, upon a moment's reflection, that the profitable range for the use of pessaries is not an extensive one. Moreover, if not employed within this range and with great judgment, the bad effects from

their use may become serious to the patient. The practitioner himself unfortunately is rarely conscious of his own instrumentality in the damage done, as it is but natural that the consequences, if recognized, should be attributed to almost any other cause.

I realize fully that I may be misunderstood and my views hereafter misrepresented, in a statement that I do not approve of the use of pessaries. I therefore beg to state distinctly that I believe nothing can take the place of pessaries when properly fitted, and when used in the proper class of cases. My purpose has been to make the point that the field for the usefulness of the instrument is a much more limited one than is generally realized.

But an attempt to teach something new on this subject seems almost a thankless task in this day and generation; for I have observed that, if there is one thing more than another which is now considered to be thoroughly understood in all its bearings by the general practitioner, and by those who have the least knowledge of the diseases of women, it is the fitting of a pessary. Therefore, it is not to be expected that a man who prides himself upon his skill in this line will change his practice, yet he may mistake, as an evidence of his dexterity, the degree of tolerance with which the Almighty, in his infinite wisdom, has endowed the female pelvis.

I have no wish to battle with this weakness of human nature, even if the field were a more promising one. My purpose is simply to present to the thinking portion of the profession the result of a long and careful study of the subject. This experience may be summed up in the statement that a displacement should never be corrected simply on its own account, nor until the cause has been clearly ascertained. Nor should a pessary be employed without a clear understanding as to what is to be accomplished by its use, beyond merely changing the degree of version.

In fact, we must regard a displacement of the uterus as a symptom merely, and, as soon as this becomes generally ac-

cepted, the cause will be sought for intelligently. We will then see less damage done through the ignorant use of pessaries, and those who now denounce them will become convinced of their great efficacy.

I doubt not that every one within range of my voice will agree with me, and without question, that no attempt should be made to correct a displacement of the uterus so long as any evidence of recent inflammation can be detected in the neighborhood.

And yet so thoroughly are we imbued with early teaching, that we are constantly doing what we would severely criticise as the act of another. Many of us do not examine our patients carefully enough by means of the finger in the rectum, and hence we remain in ignorance of an existing local peritonitis, which often is not discovered from the vagina. Through force of habit and without thought of the consequences, we resort to the dangerous use of the uterine sound, or to the unnecessary employment of the elevator to correct a version, when in such cases, where the operation is justifiable, it could be done far better and with safety by means of the finger.

We have all been taught in early life that a displacement is a condition which should be corrected for the same reason that a luxation of a bone should be reduced. If the displacement be a recent accident, the practice is correct in both instances, but no one will gainsay the fact that it would be a criminal procedure to attempt the reduction of a long-standing luxation, without a full appreciation of the responsibility assumed, and of the danger to the patient. How many of us have, time and again, in ignorance of all previous history of the local condition, thoughtlessly lifted a retroflexed or a retroverted uterus, and have justified the consequences with the statement that the patient did not bear well the use of pessaries? I do not think that I exaggerate when I claim that the evil consequences to the patient would be less from the skillful reduction of a long-standing luxation.

My statement of the case will be met with the plea that something must be done to enable these women to get about, and many experiences will be cited to give varied instances where they were sufficiently relieved, after the introduction of a pessary, to be fairly well. I acknowledge that the remembrance of such cases has great weight in reconciling one to the temptation of doing for an individual what we are all willing to confess would be as a rule a disastrous course of practice. I have traced the history of a large number of women who have been thus treated for displacements of the uterus. Year after year they have passed from one medical man to another, and each in turn has lost sight of the case with the impression that his individual dexterity in fitting the pessary had been successful. As a result of this investigation, I am free to state, in all truth, that not a single instance has come under observation which was permanently cured by the use of a pessary, where there had been reason to believe that any previous pelvic inflammation had complicated the case. With a number there was a remarkable degree of tolerance, and for a time they did fairly well, but the end was the same in all, and there was no restoration to health until nature repaired the damage, so far as she was able, after the menopause.

On the other hand, under favorable circumstances, and with proper treatment, a woman can be restored to health in a comparatively short time. As the inflammation subsides, the displaced uterus will gradually return to its natural position unaided, as I have observed it frequently to do. If eventually the necessity exists to replace it, this can be then done without the slightest pain, and a pessary may be used to great advantage until the neighboring tissues have recovered their tone.

