The Significance of the Retroverted Uterus

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The assessment of a retrodisplaced uterus—and by that is meant a retroversion which is usually accompanied by a greater or lesser degree of retroflexion—is a matter which has bothered gynaecologists for a large number of years. At one time it was considered a big factor in sterility and abortion, and Sinclair in 1900 wrote that the retroverted uterus in his opinion was the most common cause of repeated abortion; other authorities agreed with him. Nowadays, however, we tend to take a more lenient view of the damage and disability caused by retroversion and are less liable to interfere with it; which might — possibly — have been in Macaulay's mind when he wrote:

But those behind cried "Forward"
And those in front cried "Back."

Because of the looseness of its attachments, the uterus is capable of a wide range of free movement; at operation a normal uterus can be drawn up to and even out of the abdominal incision. This condition is of course rendered necessary by the need for unfettered expansion during pregnancy and free mobility in relation to the varying fullness of the bladder, the stresses of intercourse and other normal bodily activities. The anteverted uterus pictured in the books is only seen when it is lying on an empty bladder, held in that position by the weight of the superimposed viscera compressing it against the resistance of an intact pelvic floor. The integrity of the pelvic floor and particularly the cervical ligaments is of great importance in maintaining the cervix at a high level, for one of the earliest signs of an impending retroversion is the commencement of a vault prolapse which allows the cervix to drop along the axis of the vagina. Once this has happened the loose and elastic round, broad and utero-sacral ligaments can do nothing to prevent the eventual retroponation and final retroversion of the organ.

This form of retrodisplacement occurs chiefly in multiparae with pelvic floor damage, but it can also arise in nulliparae. It is necessarily of slow onset, as the weakened pelvic floor gradually succumbs to the constant strain imposed upon it, but sometimes, especially in elderly women, the process can be comparatively rapid and full retroversion with prolapse may occur in the course of a few weeks or months. A frank puerperal retroversion, however, need not be accompanied by any of these changes. The heavy uterus, with the patient supine in bed for longish periods, tends of its own weight to fall backwards; once there, in spite of modern puerperal nursing, there is no normal force capable of putting it forward again. As the round, broad and utero-sacral ligaments only involute to the limit of the pull upon them, such a uterus if left until involution is complete may, when put forward, be very difficult to keep there. It is advisable, therefore, to correct a puerperal retroversion as soon as practicable and certainly not later than three weeks after delivery if the supports are to regain their normal length. This does not apply so much to those traumatic displacements from such causes as a fall or horse-riding with a full bladder; these, if discovered, which they frequently are not, respond readily and satisfactorily to manual replacement and a pessary for a couple of months. "Congenital" retroversion may exist from birth and is often associated with such other minor abnormalities as a short anterior vaginal wall, conical cervix and poor uterine development. The displacement as such very rarely calls for treatment.

The majority of retrodisplacements give no trouble, especially the congenital and traumatic varieties. When they do appear to, a most careful assessment is necessary to determine what proportion, if any, of the symptoms is due to the retroversion. Backache may be caused by sacro-iliac or lumbar strain following parturition, osteoarthritis and other spinal causes or simply ill-health and overtiredness; the site and character of the pain must be considered also. Having thus weeded out the majority of backaches, the remainder will probably benefit from any treatment either palliative or operative which will improve drainage, especially if the uterus is enlarged and heavy and the seat of a "chronic endometritis." It is now well established that a large group of patients formerly diagnosed as chronic metritis or endometritis are in fact nearly all examples either of metropathia haemorrhagica or chronic sub-involution. Fletcher Shaw estimates that a true chronic metritis does not occur in more than 1 per cent. of such cases. A number of these will not respond satisfactorily to replacement, however, and in a woman over 40 a total hysterectomy gives a far better chance of cure than any form of reposition.

Menorrhagia and leucorrhoea in conjunction with backache are the classical symptoms of a retroversion, but it is doubtful whether the first two are usually dependant on the displacement as such. The menorrhagia may be due to an endocrine imbalance and every attempt made to relieve the condition medically before embarking on surgery. Again, it may be caused primarily by a chronic subinvolution or a chronic tubo-ovarian inflammation. In these cases the menorrhagia tends rather to be an increase in quantity than in duration. The leucorrhoea is often partly due to an associated erosion or endocervicitis which will require separate treatment. When the retroversion and retroflexion are acute, other factors may come into play. With such a uterus the fundus is at a lower level than the cervix even in the erect posture, so that drainage of the menses and secretions is impeded. With a healthy organ this does not matter, but it is a different story with infection or subinvolution. Again, the view is held by many that the twisting of the broad ligament involved in an extreme backward displacement causes, by pressure on the veins, a general pelvic congestion which manifests itself in an increase in the classical symptoms, the formation of varices in the uterine veins and a congestion of the ovaries leading to *hydrops folliculi.* This last in turn paves the way for a *metropathia haemorrhagica.*

Fortunately we have in manual replacement and a pessary a useful diagnostic test; if this relieves the "retroversion syndrome" the pessary should be worn for at least three months. After its removal, if symptoms return, then operation is definitely indicated—as it is also if the pessary fails to control the displacement.

It was for long thought that a retroversion was a potent cause of sterility, especially of the primary and "one child" varieties, and for this there is perhaps some anatomical justification. At intercourse, with the woman supine and the uterus anteverted, the external os is in such a position that with full penetration the external meatus of the male urethra is directly apposed to it and more or less in the same axis; thus ejaculation may often take place actually into the cervical canal which is said to dilate slightly during the female orgasm. In passing, this may be the explanation of the comparative inefficiency of those contraceptive methods which do not interpose a material barrier between cervix and penis. With a retroverted uterus the cervix points more forwards and of course the semen will be deposited primarily in the posterior fornix, where it may be longer and more exposed to the action of inimical vaginal or cervical secretions. However, experience shows that large numbers of women with retroverted uteri become pregnant, so that the position and direction of the cervix cannot be a big factor; nevertheless, in a case of sterility with a retrodisplacement, all tests and treatment on both husband and wife having failed, it is justifiable as a last resort to put the uterus straight operatively. It sometimes succeeds in bringing about the desired result.

As already mentioned, it used to be considered that a retroversion favoured, if it did not cause, abortions. This idea was possibly helped by the fact that in a number of cases the rising out of the pelvis of a retroverted gravid uterus may be accompanied by haemorrhage, and this was taken to mean that the situation was, to say the least, rather unstable. In fact, no evidence has been adduced to show that a retroverted gravid is more likely to miscarry than a normal one. Indeed, Davis (*B.M.J.*, July, 1950), in his series of 2,665 abortions, found only 13 which were associated with retroversion. It is a matter of experience that retroverted gravids usually right themselves before the fourth month, and unless an early examination has been made the condition passes unnoticed. If found, however, it is reasonable to attempt a manual replacement, but with extreme care and gentleness, following the obstetric principle that the less a pregnant uterus is pushed about the better. If success is not easily obtained it is better to leave it alone, for although the number which miscarry is small and those that incarcerate smaller still, the attendant may well be blamed for precipitating the disaster. An incarceration gives ample warning by its urinary symptoms, and with prompt and proper treatment usually rights itself without trouble.

To summarise, it appears that in most cases retroversion has no significance and needs no treatment. Active measures are indicated in the following groups:—

(1) The early replacement of puerperal retroversion, the pessary being kept in for three months, when the uterus will probably then retain its position; if it does not it is not likely to cause trouble, as it is by then fully involuted.

(2) Chiefly masterly inactivity with the retroverted gravid. I know of three cases in which a ventrosuspension was done for this condition!

(3) Operative replacement as a last resort in cases of sterility and habitual abortion.

(4) Operative reposition of the early prolapsing retroversion.

(5) Replacement, manual or operative, for the "retroversion syndrome."

With regard to the fourth group, it must be remembered that the cause is initially a weakness in the cervical ligaments. Any operation, therefore, designed to rectify the displacement must include tightening of the pubo-cervical, Mackenrodt's and utero-sacral ligaments as well as the round ligaments. Otherwise the operator may be disconcerted to find himself faced with a recurrence of the condition some months later.