

PROPHYLACTIC TREATMENT OF PROLAPSE OF THE BLADDER AND UTERUS*

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I PURPOSE to consider this evening certain principles of procedure in the conduct of labor which tend to preserve the supporting structures of the female pelvis, and to urge the recognition and correction of the conditions during the puerpium which favor prolapse, after the unavoidable weakening of these structures incident to parturition. While this subject is incidentally touched upon in scattered portions of our text-books of gynecology and obstetrics, the compact literature dealing with the etiology of prolapse and its prevention is brief and stereotyped.

Comparatively speaking, operations to prevent or correct the extreme degrees of bladder and uterine prolapse are not entirely satisfactory. New operations are daily devised and old ones modified. They are enthusiastically endorsed by some and rejected by others. Competent operators are securing good results in the early cases; but in the advanced, long-standing cases there is a considerable portion of partial failures, and a still larger percentage of morbidity, even when the anatomical results are acceptable. When a patient presents herself with a bulging rectocele, with a cervix hanging outside the vulva, and

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a low sagging bladder it is evident that either the patient or her medical attendant has been negligent. There is not the excuse of an insidious symptomless onset.

The injuries which make prolapse possible are sustained, with rare exceptions, during childbirth. It is not always possible to avoid the strains which wreck the supporting fascia of the pelvis. In a large proportion of deliveries, however, much may be done by judicious management to preserve the integrity of these supports. Considerable importance is to be attached to the care of the woman after childbirth. Extreme degrees of prolapse are seldom seen in patients who have been confined and subsequently cared for by the trained obstetrician and gynecologist. There is a reason for an urgent plea to the profession at large, chiefly through better obstetrics but also through detailed after-care, to prevent the occurrence of the extreme degrees of prolapse. It is not an exaggeration to say that fifty percent of the hard-working child-bearing women of the country districts are seriously handicapped in their activities by these untreated conditions. Competent obstetric attendance and early gynecology do more than cosmetics to keep the city woman of the better classes younger than her country sister.

The discussion of this subject is best grouped under two heads: (a) care during delivery; (b) care during the puerperium and later.

Accurate observation of the pregnant woman early enough to acquaint one with abnormalities, and if possible to permit their correction, is the preliminary step. The rotation of a breech to a cephalic presentation before labor, especially in a primipara is an example. An estimation of the elasticity of the pelvic floor based upon a consideration of age, activity, sports, muscular development and distensibility; the measurement of the outlet, and estimate of the size of the fetus aid one in anticipating the degree of damage threatening the fascia and soft structures. This knowledge has a relative importance throughout delivery. The size of the fetus at the time of delivery is the only factor in this group which may be under control. This has an increasing importance proportionate to the unfavorable aspect of the other two factors. An elderly primipara with strong muscles, a tennis player, or horsewoman with limited elasticity of the vulva will suffer extensive laceration in either a forceps or spontaneous delivery. A narrow outlet renders the likelihood of laceration greater, and a narrow outlet plus a big child, even in the event of elastic soft parts, threaten serious rupture. In fact every combination of these conditions which determines the ability of the parturient canal to adapt itself to the passenger must be considered. Preparedness should be a popular term in obstetrics.

Management of delivery.

In general, prolonged, low dragging by fetus or forceps upon the lower uterine segment, or prolonged strain upon the pelvic floor are mechanical factors threatening damage to the upper suspension and lower support. Early rupture of the membranes, especially in the primipara, thereby sacrificing lateral pressure and exaggerating downward push, is an instance. An unyielding cervix dragged low because of this faulty mechanism is the result. In many such cases the insertion of a cone shaped bag is conservative interference. The application of forceps and drag with a cervix still obstructing is generally granted a faulty procedure but sometimes it is an emergency operation and is trauma of the same nature. If, instead of the forcible

laceration thus caused by tremendous drag upon the cervix, frank incisions of the anterior and posterior cervix are made, prior to the pull, and deliberative repair made afterwards, so-called radical interference becomes a protective procedure.

Delivery of the occiput in an unrecognized posterior position, or forceps rotation of a posterior occiput in the pelvic cavity are frequent causes of unnecessary damage to the pelvic structures. In the primipara at term, with ample pelvis, head presenting but not engaged, or early rupture of the membranes with unsatisfactory pains mostly in the back, suspicion of posterior positions should immediately arise, and early in the first stage effort to confirm this suspicion should be made. More frequently the head engages in a posterior position. For some months in the Obstetrical Department of Brooklyn Hospital, Dr. Pomeroy's method of rotary version above the brim has been practised in certain cases of this kind with gratifying results. Indications for this procedure are presented when a primipara with a posterior position has a long unsatisfactory first stage and the progress of labor is so slow that the patient, in spite of rest under narcotics, becomes exhausted, or retraction ring occurs before the head can be brought to the rotating planes of the pelvic floor, thus demonstrating her inability to terminate the labor. When posterior position is found with membranes intact and with retarded descent and dilatation, the case is allowed to proceed until the cervix will admit the hand. If the patient is now tiring and progress is at a standstill or very slow, the membranes are ruptured and the posterior position is accurately determined under anesthesia. If rotation is done the following method is carried out. After careful cleansing, catheterization, and deep anesthesia, the hand (the left for the left posterior position and the right for the right posterior) is introduced within the uterus. The head is raised out of the brim as the hand is introduced. The baby's face is turned so as to allow the operator's hand to slip by to grasp the occiput in the palm of his hand, with the longer fingers fan-shaped upon the back and shoulders. This starts the rotation with the hand and the arm in an awkward reverse. Then with a rotary motion the R O P position is changed to an L O A. This is done above the brim. A rotation of 180 degrees is done and the head follows the withdrawn hand into the brim in an anterior position in the same diameter of the pelvis as it previously presented. Often a prompt spontaneous delivery takes place or at least an easy forceps operation is ultimately offered. In the cases so rotated about sixty percent deliver themselves spontaneously. Rotation in this fashion not only shortens labor, but, what is vastly more important, it makes unnecessary the rotation of the long axis of the usually poorly flexed head in the pelvic cavity by hand, forceps, or prolonged drive. Such rotation results in terrific lateral pressure often tearing the pelvic fascia from its side attachments, and constitutes one of the most damaging injuries to which the fascia of the pelvic floor is subjected.

Similar injuries may result from a long drive of the head upon the unyielding perineum. The pelvic fascia is the structure threatened as well as the muscle. Eternal vigilance in the effort to save the perineum is often misapplied energy. Either lateral rupture or disabling stretching of the fascia may take place without noticeable laceration. If delivery is being prolonged because the opening in the soft structures makes escape of the head impossible without laceration, then a clean incision in the perineum (perineotomy) allows deliv-

ery while protecting the fascia from violent rupture and leaves a wound easy of repair. Such incision may be lateral in either sulcus or bilateral. The median incision is the easiest to repair, or if allowed to go unrepaired it is of less consequence than the common irregular lacerations.

Marked prolapse of the bladder results in part because the bladder is torn from its attachments. This damage is often increased no doubt because a partially filled bladder is permitted to sustain the pressure of the muscular effort of expulsion and of a descending part which constantly tends to displace it. This means exaggerated strain upon the vesical supports. I have discussed these injuries in more detail in a former article (*Transactions New York Obstetrical Society*, 1915-1916, pg. 55). A simple and important prophylactic step, then, is to see that the bladder is well emptied during the second stage of labor and that catheterization always precedes operative delivery.

A properly prepared rectum is of the utmost importance to lessen the strain upon certain pelvic structures. Not only does the diminished room posteriorly increase the tension elsewhere but if one has observed the progress of labor when the rectum was partially filled he will have noted an increased trauma upon the rectum.

The importance of repairing lacerations need hardly be emphasized. It should be stated, however, that the desirability of immediate repair should not lead one to an immediate difficult operation under unfavorable conditions when by waiting a day or two a deliberate and far more satisfactory repair may be done.

Care during the puerperium.

No arbitrary time can be stated as the proper day to allow the obstetric patient out of bed. The degree of involution of itself is not sufficient guide. The physique of the patient, inherited tendencies, (ask the patient's mother), character of the labor, the injuries or length and degree of tissue stretching, and the recuperative power of the patient and the tissues must all be considered. Control of the patient upon such a basis constitutes important prophylaxis against prolapse. Careful examination of the lying-in patient before she is allowed to be active or on her feet is one of the rudiments of puerperal care but is either often neglected or the findings are ignored. In addition to the condition of the pelvic outlet, the position of the fundus of the uterus is of great importance in the consideration of our topic.

Backward falling of the fundus means either a lifted cervix or a flexed isthmus; with inefficient drainage and subinvolution in either case. Therefore a wedge of increased weight and damaged support rests upon the vaginal canal in a position to favor descent. This is not theory but fact. Such a lesion may cause early symptoms suggesting examination and correction of the displacement. However, sometimes no symptoms are complained of and the condition, if routine examination is neglected, continues until prolapse is well established. Not only do I carefully correct any backward displacement with pessary support before the patient is allowed upon her feet, but in patients who have had retroversion at any previous time a pessary is placed as a preventive against recurrence. If tenderness prevents the use of a pessary then the knee-chest position should be faithfully utilized. Early correction of the displacement favors a normal involution of the pelvic structures and should not be neglected. For

similar reasons routine examinations should be made six to eight weeks post partum.

Beginning cystocele or rectocele early in the puerperium usually indicates damage that will ultimately require operation. In these cases artificial support during the period of involution may accomplish something. Operation may be deferred until childbearing is over without serious consequences, providing (a) the damage to the fascia is not too great; (b) that the prolapse is not increasing under favorable conditions; (c) that the patient co-operates in preventive measures during the puerperium and subsequent to it.

One of the most frequent errors made and one often productive of prolapse is too early resumption of household cares with frequent lifting of the baby. Vaginal examination of the puerperal woman in the upright position, while lifting a very moderate weight, will teach the lesson. The baby's weight increases so gradually that the mother discovers no reason for less frequent carrying. Here, then, is an etiological factor common to a large class of patients which may be partially controlled by detailed instruction and personal supervision.

An ill-fitting corset which constricts the abdomen at the waist line may play a very important rôle in producing prolapse when any weakness of the uterine or vesical support exists. The amount of downward displacement of the pelvic contents which a waist constricting corset produces depends chiefly upon tightness, number of hours worn, laxity of abdominal muscles and weakness of the pelvic supports. The lax abdominal wall and prominent abdomen of the early puerperium prompt a woman to wear a corset at a time when conditions allow a poorly fitting corset to exert its most harmful effect. The skeptic may find proof if he examines the patient in the standing position with the corset removed and continues the examination while the corset is adjusted. Present styles are enlarging the waist and constricting the hips, but the cheaper corsets still have the small waist and this type is the one worn, usually, by the woman who must take up laborious duties at once. Corset pressure is force that must be controlled in the prophylactic treatment of prolapse. Full details cannot be given here. No corsets, except to support waist bands, the first few weeks after delivery (4 to 6) should be the rule. When again allowed a new one should be fitted under careful supervision, or if this is impracticable, instructions should be given as to the adjustment of the old one which will enable it to make the least possible constriction of the waist and lower thorax.

Among factors which may play a part in the production or increase of prolapse during the puerperium, straining at stool should be mentioned. This is of course the result of constipation and may be immediate or remote in its effects. By immediate I refer to the unsatisfactory healing of repaired lacerations resulting from undue strain upon the sutures. By remote, I mean the immense downward pressure which may be exerted upon the pelvic organs daily during the puerperium by the straining of the habitually constipated woman. With involution incomplete and the supports much relaxed from recent delivery or operation, prolapse may gradually result. Measures to relieve constipation (diet, habit, and medication) are called for and instructions to avoid straining are important. For the same reason any active or prolonged cough during the puerperium should receive prompt attention.

The habit of allowing the bladder to go long unemptied, common among women, has only a relative influence in increasing bladder prolapse where some degree of cystocele exists. In examining certain stout patients with the corset in situ and with the bladder filled, I have noticed that the anterior vaginal wall prolapsed far below its usual position. Emptying the bladder diminished the prolapse. I assume, therefore, that a cystocele may be unduly increased by this faulty hygiene.

Finally, so that the importance of the foregoing items shall be emphasized to the patient, and so that carrying them out shall not be left to the accuracy of the memory, either of the physician or patient, I give the puerperal woman a printed list of instructions** which is a very brief summary of the points covered in the concluding portions of this paper.

** A copy of these instructions will be mailed gladly to any physician requesting it.