THE DETAILS OF POSTPARTUM CARE*

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OVER 60 per cent of the lesions which make up the diseases peculiar to women are the direct results of poor midwifery, the incidence of trauma, infection, and a lack of appreciation of the physiologic and biochemical processes which take place in involution,—yet little or nothing has been collectively written regarding their prevention by better intrapartum and postpartum care. The functions of the obstetrician are:

1. To deliver the woman of a living child with minimum injury to her general system and to her local soft parts.

2. To leave her in such physical condition that she may be an economic asset to her family and to the community, namely, assume charge of her child, nurse it, and attend to her household and social duties. To obtain such a result, presupposes careful antepartum observation, a labor that is properly managed, hemorrhage controlled, injuries repaired, involution completed (which is favored by breast feeding) and, before she is discharged, the correction of uterine displacements. In this short contribution, I shall describe some of the practices employed in our postpartum and follow-up clinic at the Long Island College Hospital; briefly reviewing the physiology of involution, in order that we may lay emphasis upon the effect of subinvolution and the correction and retention of acquired retrodeviations. In support of my contentions I shall give a few figures from the clinic and from my pri-

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to bring it within the grasp of the hand, is laid down in the abdomen to obliterate the uterovaginal angle and at the acme of the contraction the placenta is expressed by Credè. As the placenta escapes from the vulva the right hand is placed just above the pubis, the lower segment is grasped between the thumb and fingers, and the uterine body is raised out of the pelvis while the lower segment is compressed against the sacral promontory. As the uterus is raised out of the pelvis the inverted membranes are detached by the traction made upon them by the weight of the placenta. Cutting off the uterine blood supply by compression of the lower segment against the promontory favors contraction and retraction of the fundus. By following this technic in detail our average blood loss in the past two years has been less than 200 c.c. which figure includes two postpartum hemorrhages of 1600

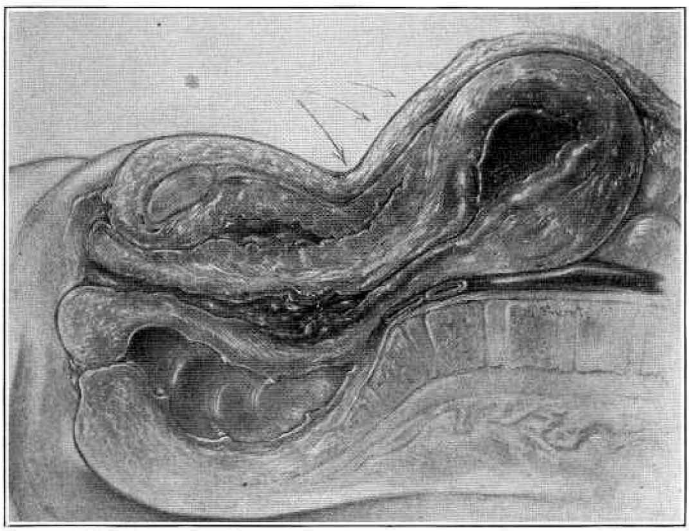

Fig. 2.—Sagittal section showing compression of the lower uterine segment against the promontory and the iliac vessels.

c.c. each. This maneuver was first suggested by R. L. Dickinson in 1908.

Bleeding of any considerable amount occurring immediately after the delivery of the child, with the fundus firm, indicates cervical injury and should demand inspection of the cervix after the placenta has been expelled.

Primary suture of the torn cervix with proper technic is relatively easy and these immediate repairs heal with great nicety and obviate later trouble. Routine cervical suture, however, cannot be generally indorsed for it is distinctly a hospital procedure and requires surgical training *and a perfect aseptic technic.*

When the uterus is firmly contracted and all uterine bleeding has ceased a sterile vaginal tampon is placed against the cervix and the

pelvic floor injury is exposed by lateral traction with a Gelpi or Friedlaender retractor and an anterior trowel so as to illuminate the limits of the tear. A traction suture is then placed parallel to the long axis of the vagina, entering at the lateral limit of the tear, passing deeply under the vaginal mucosa so as to include the levators of one side to the apex of the wound and down through similar tissues on the opposite side emerging at a corresponding point to the point of entrance. Traction on this suture brings the levators forward and

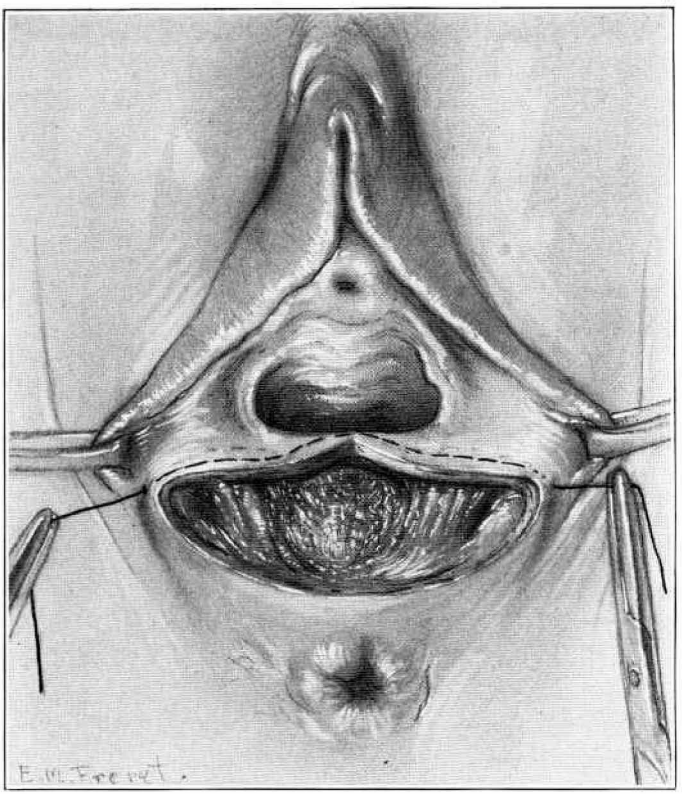

Fig. 3.—Preliminary traction suture passed behind the levators and above the apex of the perineotomy wound—traction on the ends brings all of the tissues forward and facilitates suturing.

makes repair of the uppermost angle easy; for the uniting sutures can then be passed from above downward bringing like tissues together, fascia to fascia, muscle to muscle, and mucosa to mucosa. This repair may be done with interrupted sutures of iodized gut (which we use) or with a buried continuous suture. There is some advantage in having the traction suture of silkworm-gut, for, when tied, it acts as a splint. *No pads are used for we believe that the wound is sealed in a few hours and that pads are likely to carry rather than prevent infection.*

suitable active exercises, (8) by intermittently emptying the venous pelvic engorgement by having the patient assume the knee-chest position several times a day, (9) by recognizing and treating the coexisting erosions of the cervical mucosa at a time when extension of the infection may be prevented, (10) by the correction of all malpositions and displacements of the uterus with the associated engorgement of the pampiniform plexus by posture, manipulation, and the retention of the reposited uterus with a properly fitted pessary, and (11) in checking up on these conditions by periodic postpartal examinations until the involution is complete and the anatomic relations perfect.

It is needless for me to call attention to the means of minimizing the trauma of labor, except to restate the principle that the cervix must be fully dilated by the physiologic processes; i.e., labor pains and the hydrostatic action of the bag of waters; and the head must have passed through the cervix or the cervix be so dilatable that the head can pass through it before artificial aid by forceps or version can be considered. Furthermore, we believe that the employment of a properly timed perineotomy in selected cases will preserve the fascial and muscle structures better than the older methods of time, stretching and laceration. Likewise blood loss must be controlled in the third stage of labor, for the anemic woman has less individual resistance to infection and toxemia and in recuperation than the robust normal individual. The anemic woman stands surgery and anesthesia badly, hence in case of excessive blood loss, it is well to allow the woman to react from her shock and have the volume of blood increased by transfusion or infusion before any surgery is undertaken. When injuries do occur immediate surgical repair (patient's condition permitting) should be the rule; this means muscular and fascial reconstruction not mucous membrane and skin suture. At the Long Island College Hospital we make of this repair a surgical procedure, often postponing the operation until the next morning if the labor has been tedious, operative with long anesthesia, and much blood loss.

Contraction and retraction of the uterus must be maintained by ergot and the fundal ice bag in order that thrombi may organize within the vessels. It is the retraction that controls bleeding while the contraction favors uterine drainage. By placing the patient in the Fowler position and encouraging her to turn upon her abdomen three or four times in twenty-four hours the vagina is kept free of lochia, the downward drainage prevents the multiplication and upward migration of the bacteria of the vaginal flora. By lying on the abdomen the woman empties the vagina of all retained discharge and hence the cervix no longer rests in a pool of bacteria.

During pregnancy the enlarging uterus gradually distends the abdomen and separates the recti muscles. When at the close of labor the uterus is suddenly emptied of its contents the intraabdominal pressure is lowered and the intestines and bladder lose their muscular tone and are therefore subject to distension. It was formerly the practice to control this distension by employing a tight abdominal binder, under the false impression that this artificial support would

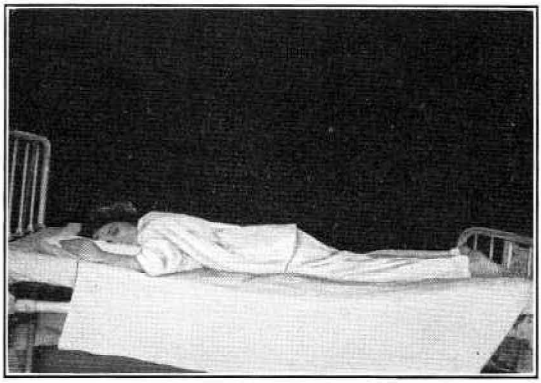

Fig. 4.—Postural drainage. Patient on her abdomen in the Fowler position.

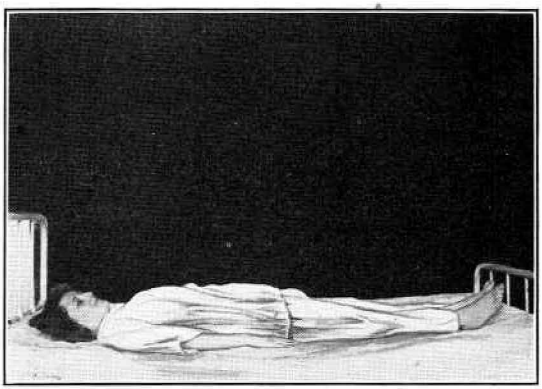

Fig. 5.—Breathing exercise.*

remedy the muscular weakness. We now know that the muscular tone of the abdominal muscles may be restored by suitable active exercises which the woman can do several times a day while lying in bed, and so replace the muscular support that nature intended the abdomen to have. These exercises may be begun after the first forty-eight hours of the puerperium.

When we consider the immense increase in the pelvic circulation necessary for the development of pregnancy, we can readily appreciate

*Figs. 5 to 13 show exercises used during the first ten days of the puerperal period in the maternity service, Long Island College Hospital.

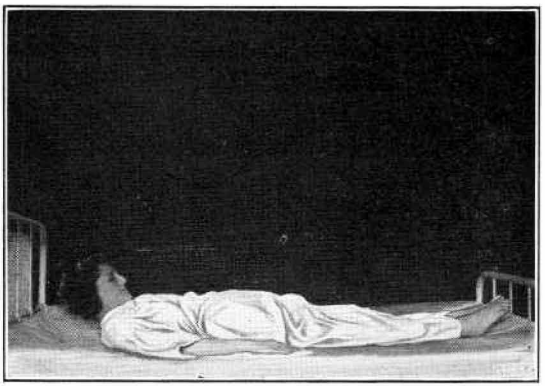

Fig. 6.—First exercise used for improving tone of the abdominal muscles.

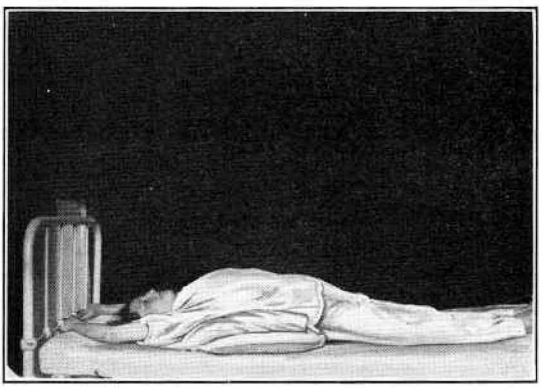

Fig. 7.—By elevating the diaphragm the abdominal content is raised and circulation improved.

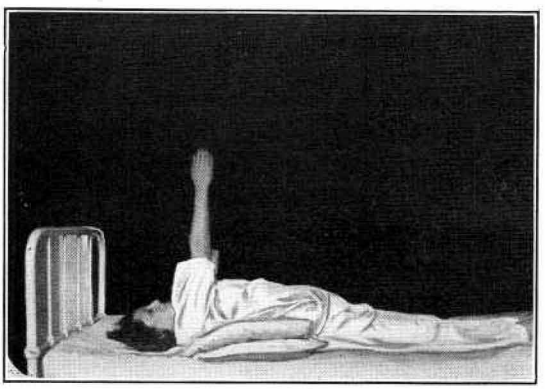

Fig. 8.—Deep breathing exercises.

that the sudden emptying of the uterus with its firm retraction, compression, and vessel torsion will so engorge the pelvic veins that edema and tissue swelling must take place, unless the engorged veins are emptied by gravity as when the knee-chest position is assumed for ten minutes three or four times a day. This position serves the double purpose of emptying the engorged veins and massaging the pelvic ligaments and may be begun as soon as the lochia alba appear. With

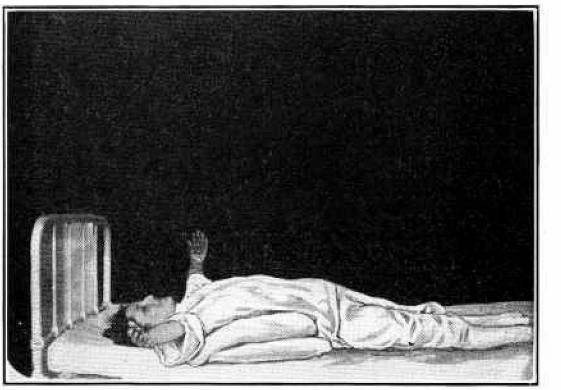

Fig. 9.—Deep breathing exercises.

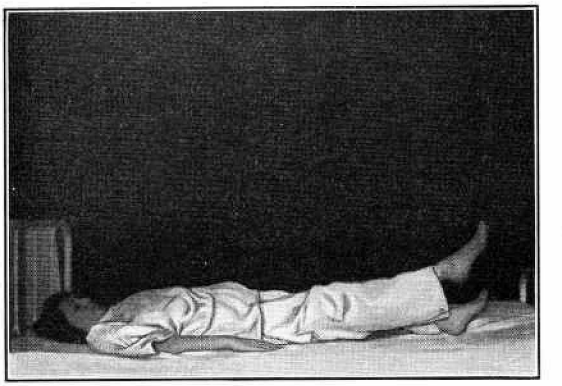

Fig. 10.—Leg exercises for developing the abdominal muscles.

lochia rubra we cannot be sure that the sinuses are completely closed, hence there is possible danger of embolus or of an extending thrombosis by too early muscular activity. Not infrequently the use of the knee-chest position will start up a red lochia; this is an index that retraction is retarded and that exercises should be discontinued until the bloody discharge ceases. Just about this time; i.e., the fourth or fifth day, when all fragments of placental tissue have been separated and expelled, the mammary secretion begins and may become excessive, with marked breast engorgement and physical discom-

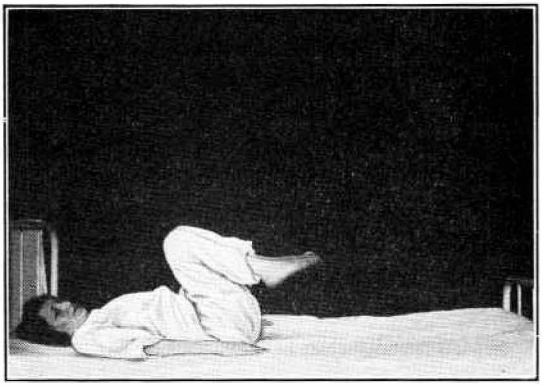

Fig. 11.—Leg exercises—developing the tone of the abdominal muscles.

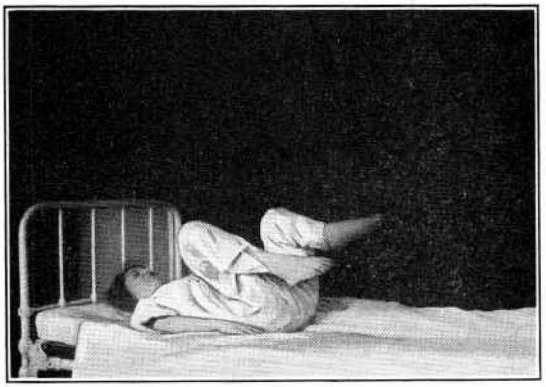

Fig. 12.—Abducting the thighs to tone up the thigh muscles.

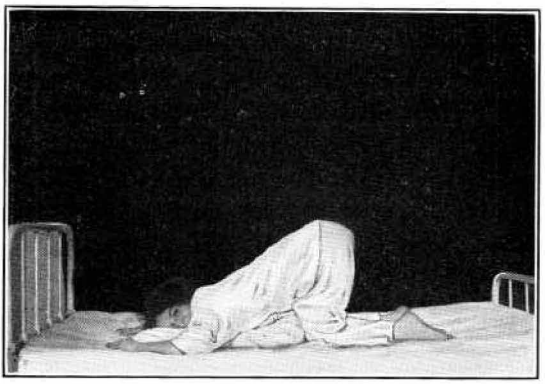

Fig. 13.—Knee-chest position favors emptying the pelvic veins and massages the ligaments.

fort. A single dose of ¼ grain of morphine with breast support will usually control the excess secretion and give comfort; however, if the breasts are large, hard, painful, and pendulous with indurated areas in the outer lower segments, strapping with zinc oxide plaster strips, so placed that they both support and compress the gland, will give almost instant relief, for when properly applied the flow of milk from the nipples is immediately established without trauma to the lactiferous tubules. Mammary strapping, also, has a valuable place in controlling incipient breast infection; as for example, a puerpera of about the eighth or tenth day who has suffered from fissured nipples, has been using a shield, and has had the usual palliative treatment, is suddenly seized with a chilliness, a rise in temperature, localized pain, and an area of induration in the breast. Under such conditions it is our custom to discontinue breast feeding and give ¼ grain of morphine to control the milk secretion, to quiet the pain, and to promote the well-being of the woman. The breast is then snugly

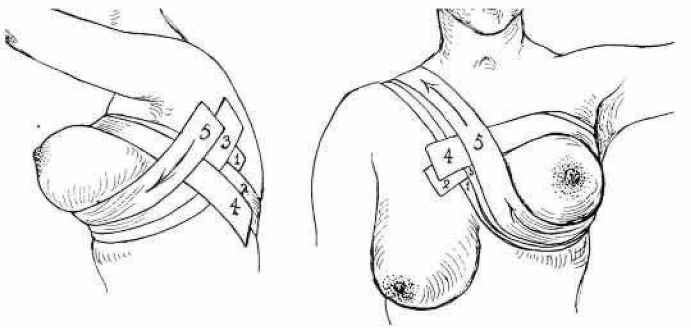

Fig. 14.—Breast strapping for the control of engorgement and as a prophylactic in incipient infection.

strapped in such a way as to produce peripheral circulatory compression as well as to give breast support; in many cases the pain and induration subside and abscess formation is averted.

The cervix after labor is always the seat of a granular endocervicitis, which produces an irritating discharge and is liable to become a mixed infection from the upward spread of the vaginal flora. The application of the electric cautery knife by crucial incision or circular searing to this everted erosion speedily cures the discharge and causes an inversion of the cervical mucosa.

For a number of years it has been our custom to make the final examination of each patient about two days prior to her discharge from the hospital, usually on the fifteenth or eighteenth day of the puerperium. At this time the uterus is commonly found to be well involuted, anteflexed or anteverted, and slightly lower in the pelvis than normal; the vaginal mucous membranes are turgid and the parametria are tender. The patient is then directed to take a "postpartum pill" three times

a day, keep her bowels regular with water, fruit, cereals, and mineral oil, avoid overdistension of the bladder, support the breasts with a well-fitting brassiere, and to wash the nipples before and after nursing with a boroglyceride solution. She is then taught the "monkey trot" and the "mule kick" and is instructed to do these exercises for five or six minutes night and morning. These exercises empty the pelvic veins, massage the ligaments, and help to maintain the uterus in an anterior position.

As a result of the foregoing plan of puerperal care over 90 per cent of our women were discharged from the hospital with the uterus in normal position, but when these same patients returned to the clinic for their follow-up examination three to six weeks later, 38 per cent had the uterus retroverted or retroposited. About eight years ago we started the practice of teaching the "monkey trot" and the "mule kick" to our

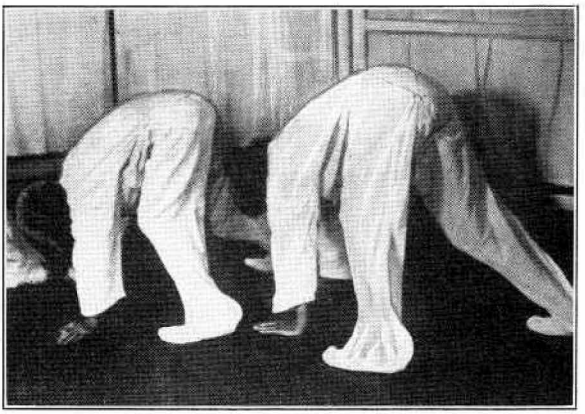

Fig. 15.—The monkey trot.

postpartum clinic and private patients, instructing them to employ these exercises night and morning during the time between their examinations. The adoption of this plan was rewarded by an incidence of only 3 per cent of retroversion, and of these, 2 per cent could be manually reposited and retained by a pessary.

Uterine bleeding after the patients were discharged from the hospital was another annoying symptom which was almost always found to be coincident with subinvolution or displacement; ergot and exercises controlled it when due to subinvolution, while the pessary cured the hemorrhage due to retrodisplacement.

In this day of surgery the pessary is a much neglected aid, yet I feel sure that the large majority of acquired retroversions, provided the patient has intact structures, if treated before they become flexions, can be relieved and many times permanently cured with the pessary.

In closing, permit me to say that too much stress cannot be laid upon the importance of follow-up examinations throughout the postpartum

period and of the correction of malpositions before actual pathologic changes have taken place within the uterine walls, parametria, and the adnexal tissues, and furthermore, that the future health of our women depends largely upon the recognition and employment of the advances that have been made in prenatal study, interpartum asepsis, rational midwifery, and upon weeks of intelligent postpartum care. The traditional ten-day period of care after delivery, the curse of the past, is fortunately relegated to history.

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