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CHAPTER 35

LE FORT OPERATION FOR ADVANCED COLOPOCELE

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The Le Fort operation for correction of prolapse of the vagina is a procedure in which the central portions of the anterior and posterior vaginal walls are fused.

INDICATIONS

The Le Fort operation is performed for marked prolapsus uteri (or prolapse of the vagina) on elderly women who cannot withstand any of the usual major procedures for prolapsus. Many authors confine the Le Fort operation to women of 70 years of age or over who have complete prolapsus. The uterus should be less than normal weight. The operation gives very satisfactory results with a small uterus for which support is so poor that no other operation promises relief.

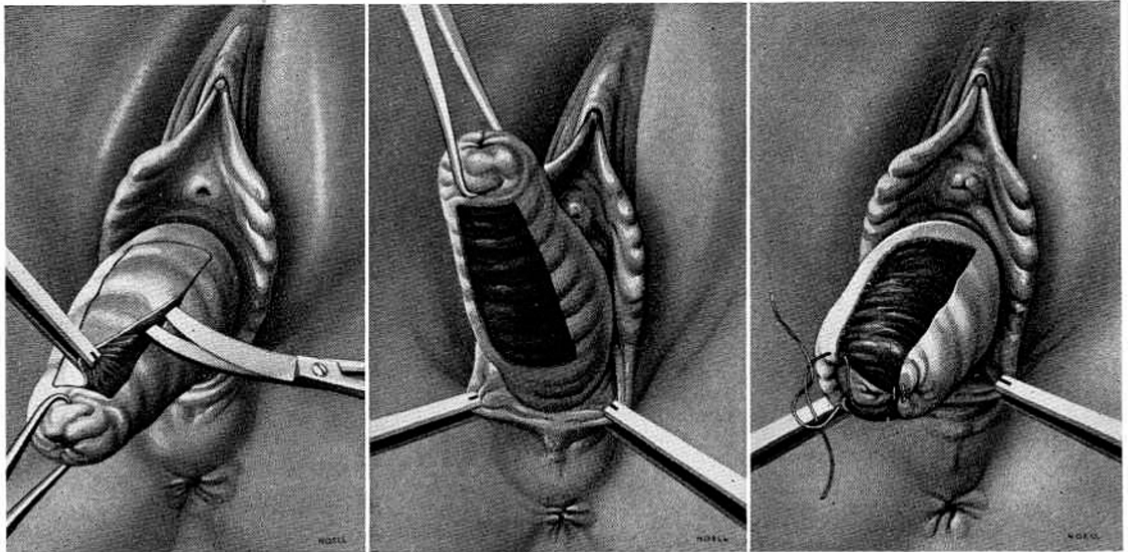

Fig. 1 Fig. 2 Fig. 3

Fig. 1. This shows denudation of the anterior vaginal wall area beginning at a transverse line 1½ cm. from the external os uteri. Above this space there remains a cross channel which permits drainage of secretions, thus avoiding formation of pyometria. This denuded area is frequently carried upwards to within 1 or 2 cm. of the urethral meatus.

Fig. 2. A rectangular area of mucous membrane about 3 cm. wide is removed from the posterior vaginal wall. This may extend from a transverse line 1½ cm. below the cervix to, or a little below, the fourchette. The vagina is then partly reinverted so that its anterior and posterior walls can be approximated in front of the cervix.

Fig. 3. This shows the beginning approximation of the cervical ends of the denuded areas. Either interrupted or continuous chromic stitches are used. Note the left side of the cervix covered, as a result of closure of the first stitch on that side. As the invagination proceeds the cervix recedes, soon being hidden as a result of the fusion of the middle 3/5 of the anterior and posterior vaginal walls.

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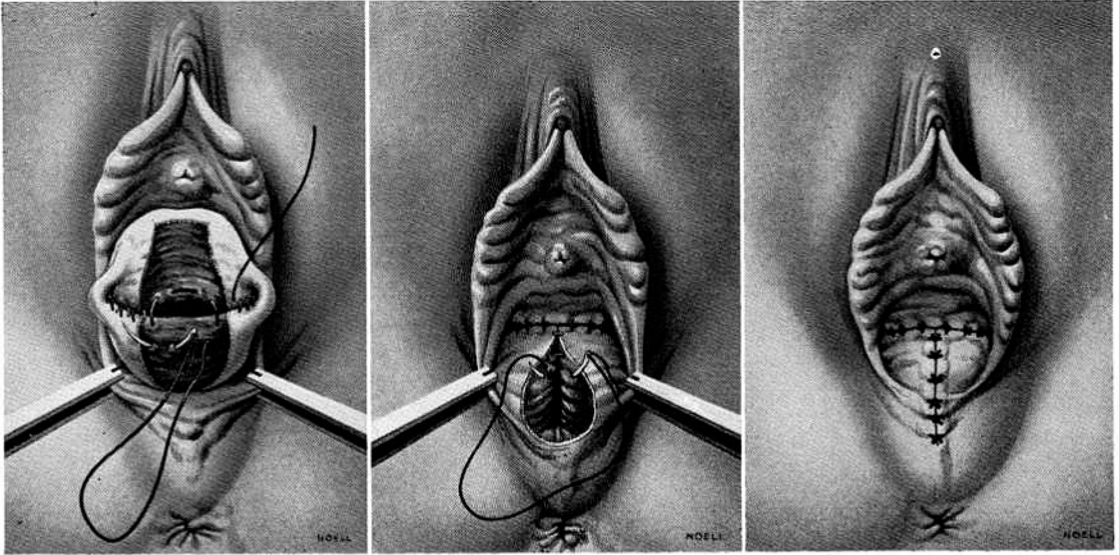

FIG. 4 FIG. 5 FIG. 6

FIG. 4. Further approximation of the corresponding lateral cut edges has been accomplished. On the right (patient's right), interrupted chromic sutures have been used. On the left a continuous stitch is demonstrated. The reinforcing stitches in the center are shown. These may also be continuous or interrupted, being spaced every 3 cm. At either side, lateral to the suture lines, the drainage channels are being developed.

FIG. 5. After the raw areas are approximated from the center outwards, the shorter anterior wall denudation leaves a denuded area on the posterior wall which permits the approximation of the levator structures to build good perineal support. At either end of the transverse suture line lie the openings of the lateral drainage channels lined with vaginal mucosa. These latter are continuous with the mucosa-lined cross channel below the cervix.

FIG. 6. The Le Fort operation and perineorrhaphy have been completed, showing openings of the drainage channels at either end of the horizontal suture line. The suture line may come to within 1 cm. of the urethral meatus and close to the fourchette, depending on the extent of the original denudations.

Many elderly patients use the globe (ball) pessary for prolapsus. But when this can no longer be depended upon to stay in place due to progressive atrophy of the muscular support, the Le Fort operation offers complete relief of symptoms.

PREOPERATIVE CARE

Candidates for the Le Fort operation frequently present ulcerations of the vaginal walls due to pressure of pessaries etc., and/or, erosions of the cervical area caused by attempts to support the prolapsed structures by wearing pads, towels etc. Rest in bed with the foot of the bed elevated, the touching up of raw areas with pyroligenous acid (100 per cent) or silver nitrate (1 or 2 per cent), and daily tamponade, can be employed where the ulcerations have any depth.

The lesions ordinarily found are superficial, and, in our experience, can be neglected entirely, as they heal spontaneously just as soon as their causes are removed. Suspicious areas can be excised before the time of operation for microscopic study, using light, local novocaine anesthesia.

ANESTHESIA AND OPERATIVE RISK

Owing to the fact that vaginal sensation is much diminished (except at the fourchette) after age 55, the author has carried out the Le Fort operation in numerous cases under analgesia consisting only of a hypodermic containing morphine grains ¼ and scopolamine grains 1/150. In such poor operative risks it is not worth the bother to use even local anesthesia.

One of our patients age 78 was successfully operated on with a blood pressure 240/160 under nembutal grains 1½ by mouth. Our oldest patient so far was 85 at the time of operation. She is now 92 and has a very satisfactory result.

TECHNIC

This is detailed in the legends of the illustrations.

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POSTOPERATIVE CARE

The operative risk is diminished by getting these patients up one to two days after operation, especially if any signs of disorientation or mental confusion are noted. The patients should rest at home after the fifth postoperative day, as a general rule, care being taken to avoid straining at stool, lifting heavy objects, moving furniture, etc., for a period of two or three months. Sexual intercourse is obviously not practical.

Where the uterine prolapsus causes back pressure on the kidneys similar to that noted in prostatic enlargement in the male, several of our patients have shown marked degrees of mental confusion with varying degrees of hydronephrosis and pyelonephrosis. The operation has relieved this mechanical obstruction in all such cases and has been followed by a satisfactory amount of mental improvement as well as relieving the distention of the kidney pelves.

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CHAPTER 36

THE MODIFIED LE FORT OPERATION FOR CORRECTION OF INVERSION OF THE VAGINA FOLLOWING HYSTERECTOMY

By C. J. Andrews, M.D., F.A.C.S., D-OG.

Different Types of Operations for Correction of Inversion of the Vagina Following Hysterectomy 214
Technic of the Author's Operation 214

Inversion of the vagina following hysterectomy has long been recognized as a particularly difficult condition to cure satisfactorily. It is often accompanied by such troublesome complications as cystocele, cystitis, and incontinence, which demand relief. Many surgical procedures have been devised to correct inversion of the vagina following hysterectomy, in all of which the inverted vagina must be reverted and held in place by either a vaginal or an abdominal operation.

In Brady's abdominal procedure, the vaginal vault is fastened to the rectus fascia. This obliterates any co-existing cystocele; and if there is much of a rectocele, this must be repaired vaginally. Payne's operation depends upon plication of the round ligaments. The Manchester vaginal, plastic repair may be used; and Berkeley-Bonney's modification of the Le Fort operation is an improvement.

Because of the frequent failure of any of the above noted procedures to give optimum support in the cure of these serious vaginal hernias, some different modification of the Le Fort operation would seem necessary. To this end a new type of approach is herewith submitted.

In this procedure as designed and employed by the author the relaxed vaginal walls before being approximated are first repaired.

TECHNIC

The inverted vaginal vault is grasped by a tenaculum at the point where the cervix was removed and the structures thus put under slight tension. A *repair of the anterior vaginal wall* is done by a standard technic so that the pubocervical fascia is separated from the vaginal wall and far to the sides, to the scar tissue which originally represented the broad ligaments (Fig. 1). Sutures are then started near the urethra and carried back to the original site of the cervix. When the fascia is dissected far to the sides, the support given will be by a strong shelf which not only holds up the bladder, but also contributes to the

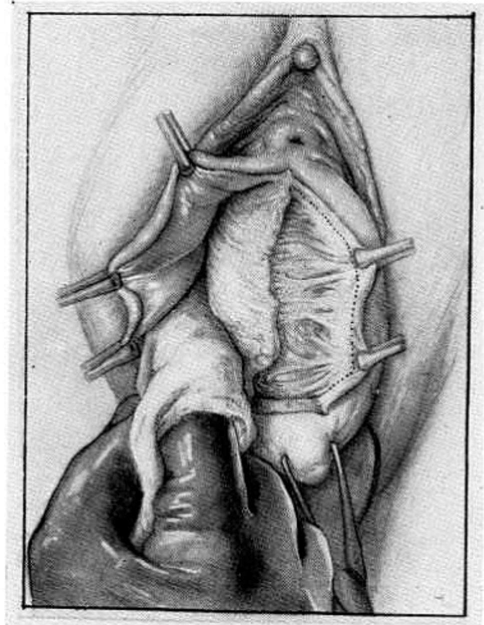

Fig. 1. Separation of the fascia from the mucosa of the anterior vaginal wall. (From Andrews, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

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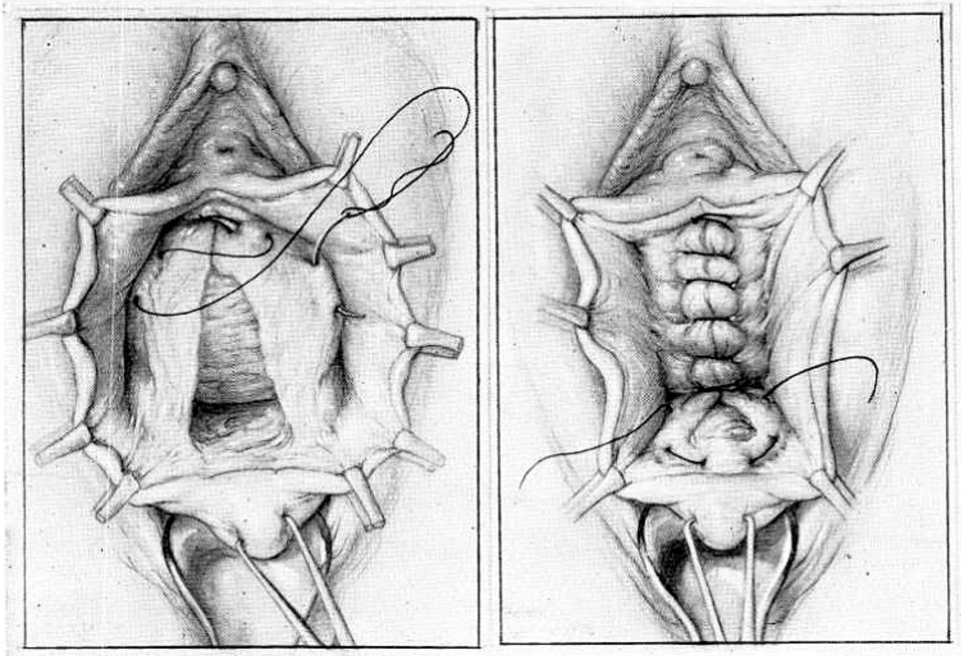

FIG. 2 FIG. 3

FIG. 2. Placing the sutures near the urethra in the repair of the anterior vaginal wall. (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

FIG. 3. Closing the fascia of the anterior vaginal wall. (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

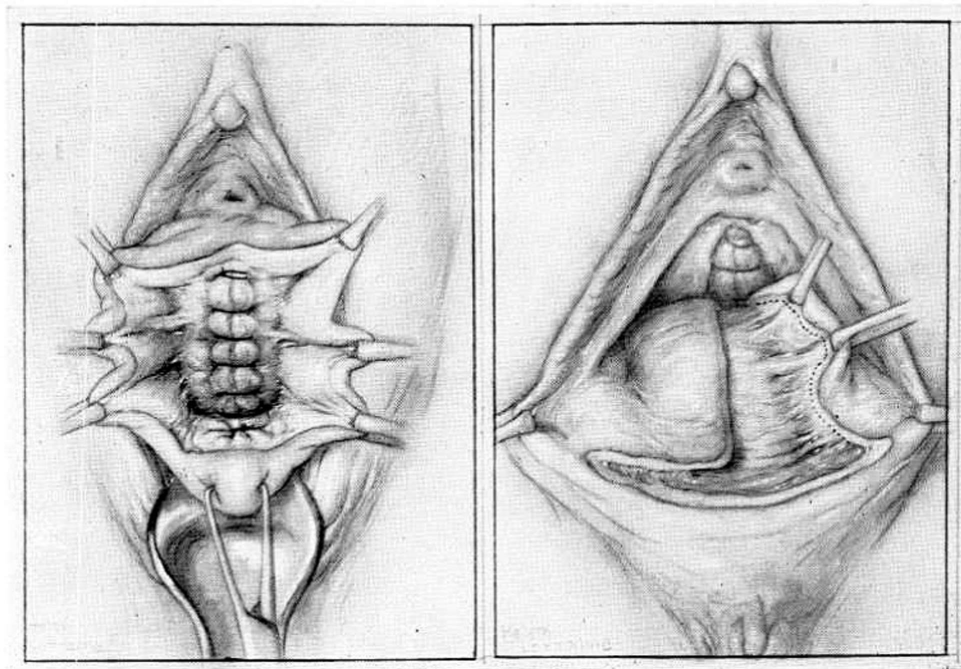

FIG. 4 FIG. 5

FIG. 4. Completion of repair of the cystourethrocele. Note that the vaginal flaps are not "trimmed off," but are later used to join the corresponding flaps of the posterior vaginal wall. (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

FIG. 5. Beginning the repair of the posterior vaginal wall. (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

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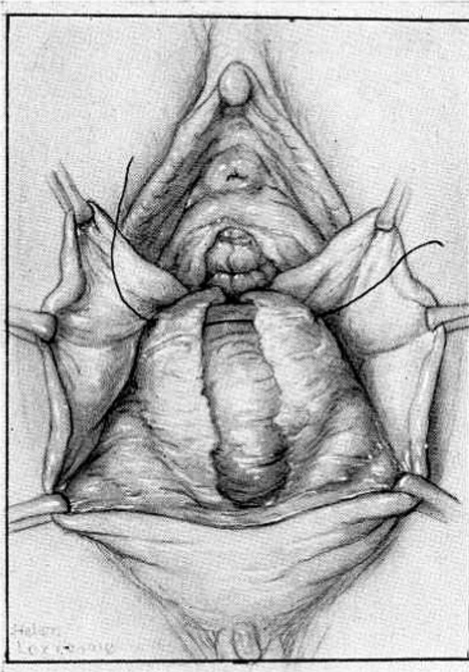


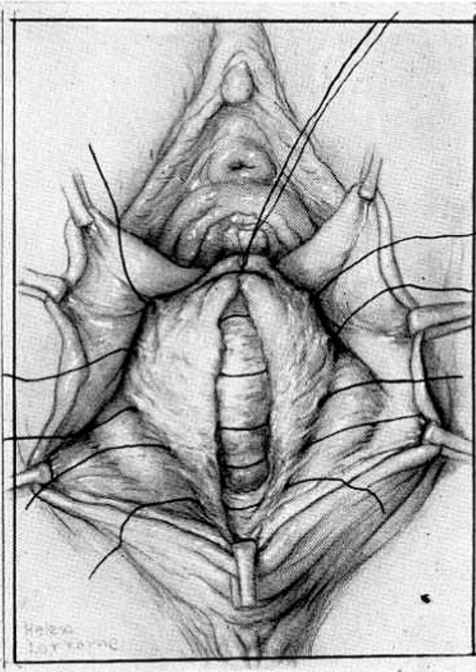
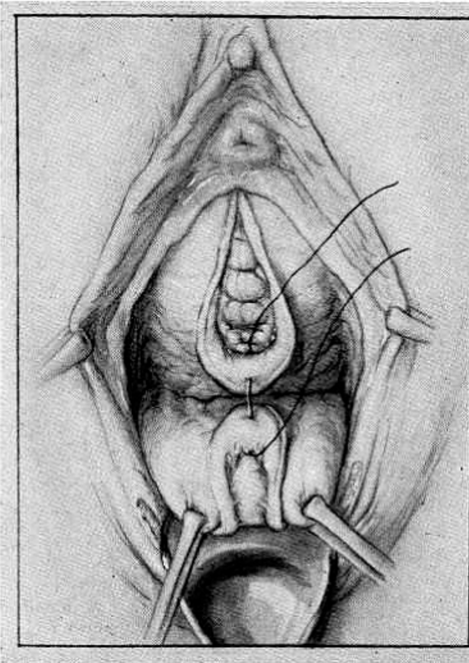


Fig. 6   Fig. 7

Fig. 6. First suture placed in the approximation of the rectovaginal fascia. (From Andrews, C. J.: *Am. J. Obst. & Gynec., 57:*448-454, 1949.)

Fig. 7. All sutures placed for approximation of the rectovaginal fascia. (From Andrews, C. J.: *Am. J. Obst. & Gynec., 57:*448-454, 1949.)



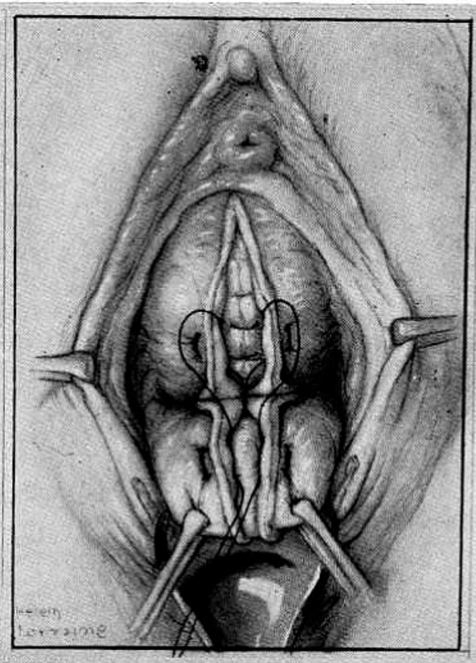


Fig. 8   Fig. 9

Fig. 8. First suture is passed through the proximal portion of the anterior and posterior vaginal flaps. No mucosa has been excised. Note that this is the first step of the approximation of the anterior and posterior vaginal walls. (From Andrews, C. J.: *Am. J. Obst. & Gynec., 57:*448-454, 1949.)

Fig. 9. Approximation of the incised area of the anterior and posterior vaginal walls by mattress sutures, tied inside and forming the median septum. Each suture carries the apex a little higher. (From Andrews, C. J.: *Am. J. Obst. & Gynec., 57:*448-454, 1949.)

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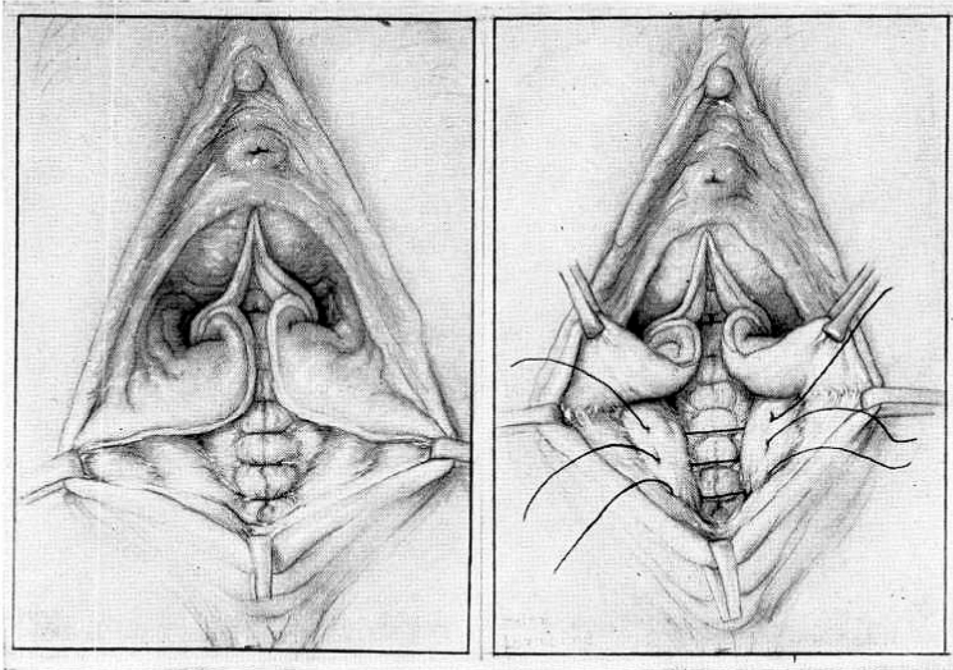

FIG. 10 FIG. 11

FIG. 10. Perineorrhaphy continued. (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

FIG. 11. Sutures to approximate the levator ani structures are placed. (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

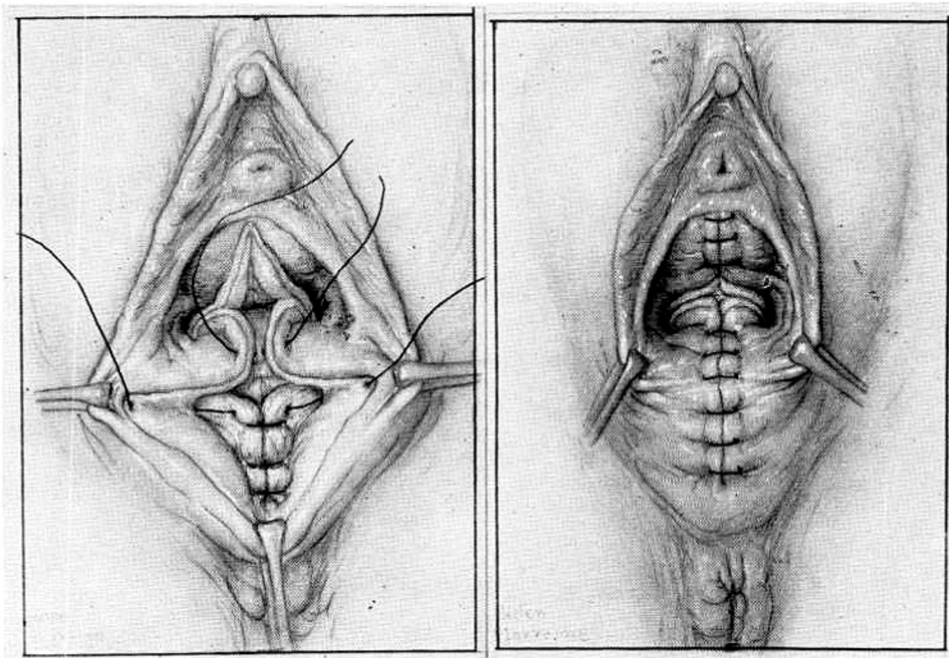

FIG. 12 FIG. 13

FIG. 12. Perineorrhaphy nearing completion. The Emmet "crown stitch" is placed and the stitching of the vaginal mucosa is begun. (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

FIG. 13. Operation effecting fusion of the anterior and posterior vaginal walls is completed. On each side of the fusion area there is a narrow mucous-lined "tunnel." (From ANDREWS, C. J.: *Am. J. Obst. & Gynec., 57*:448-454, 1949.)

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pelvic support (Fig. 2). Mattress sutures are placed over the urethral sphincter and the urethra to give support to these structures (Figs. 3 and 4).

It is to be noted that the vaginal flaps are left, to be used later and joined with corresponding flaps on the posterior vaginal wall.

Repair of the posterior vaginal wall is performed by exposing the rectovaginal fascia well to the sides and upward to a point within about an inch of the vaginal vault (Fig. 5). The fascia is then approximated by interrupted stitches beginning near the anterior end of the dissection and carried to the end of the perineum near the rectum (Figs. 6 and 7).

The levators are next approximated by sutures (Figs. 9 and 11). Using the Berkeley-Bonney method the anterior and posterior vaginal walls are fused together by approximating the two vaginal flaps of the anterior vaginal wall to the corresponding flaps of the posterior vaginal wall. A sufficient number of mattress sutures are used and, beginning at the top, each suture when tied carries the previous one higher, *thus gradually re-inverting the vagina* (Figs. 8 and 10).

The Emmet "crown stitch" suture is next used and is carried from the left side of the original incision through such structures as are available, including the levators. The crown stitch along with such additional stitches necessary when tied will raise the perineum high (Fig. 12).

The skin of the perineum is closed by a fine catgut running stitch which is continuous with the final closure of the mucous membrane (Fig. 13). As a result of the operation the vagina is completely reinverted and held so by virtue of fusion of a fairly wide strip of the repaired anterior and posterior vaginal walls. Necessarily, on each side of the fused area there is a narrow "tunnel" lined with vaginal mucosa.

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