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Editorial

THE ABDOMINAL CERVICOPEXY AND SLING OPERATION  
FOR PROLAPSE: A REAPPRAISAL

In a developing country like India, due to the poor Obstetric care and a high perinatal loss, one often sees among the rural population young primiparas with considerable uterine prolapse but without a living child. The migrant urban population may show similar cases as according to tradition the young Indian primi has to go to her mother's home for delivery even if it is in rural area. Nulliparous prolapse due to poor tissue development is also seen in India with an incidence of 5 to 8% (slightly higher than that in developed countries). Conservative non-surgical treatment is difficult for them as even this requires some degree of medical supervision which is unavailable to them. Hence they need a surgical operation which will not only retain their fertility but also their ability to have a normal vaginal delivery in their rural surroundings.

The standard Manchester-Fothergill type repair is unsuitable for them because of the common triad of its sequelae viz: Infertility or repeated abortions due to the loss of the cervix, cervical dystocia in labour and should they fortunately escape all these, a high percentage (over one third) develop recurrence of prolapse after vaginal delivery.

Naturally the initial effort was to modify the Manchester operation by making an extended parametrical fixation without amputation of the cervix. While this modification maintained fertility the operation

still has a high recurrence rate of prolapse after delivery.

With this background were the sling operations or abdominal cervicopexy operations developed, mostly by Indian Gynecologists, to suit their patients' needs. This experience now extends to 4 decades. Initially the patient's own fascia was used, viz: fascia Lata or the external oblique aponeurosis at the region of the rectus sheath. Only later when the tapes of synthetic materials were available, they were utilised.

The uterosacral sling operation consisted of: fixing the sling of fascia Lata or synthetic tape posterior to the cervix carrying it extraperitoneally from both the sides of the rectum and fixing it to the anterior longitudinal ligament over the sacral promontory. On the left side, the sling had to be looped round a psoas hitch to prevent pressure on the sigmoid colon. This operation although simple in its principle often produces technical difficulty, especially for beginners. Tearing of veins in the presacral region often leads to profuse hemorrhage. The fixation of the strip to the cervix, promontory or the psoas loop depends on thin sutures. Since the strength of a chain is that of its weakest link, should the anchors of this tape give way, the entire operation becomes a failure. Separation of the psoas hitch leads to marked compression and kinking of the colon, with its persistent symptoms. Because of all these sequelae,

the operation could never become popular in average hands.

The abdominal cervicopexy operation, by contrast, is very much simpler. Using Pfenneinsteel incision, two strips of rectus sheath—one on each side of midline—are prepared, and fixed to the exposed anterior surface of the cervix with the non-absorbable sutures, the strips being carried there extraperitoneally in the same way as in modified Gilliams operation. The marked elevation of the cervix thus achieved causes retroflexion of uterus, which is prevented by plication of both the round ligaments. This operation being simple even for a novice, has received extensive trial in several hands and satisfactory results have been achieved.

A survey five years ago showed that in the Indian clinics which did use such operations, the abdominal cervicopexy was the most commonly used operation.

The two operations illustrate two different principles of slings. The former can be called: "A static Sling", the one which remains rigid during changes in intra-abdominal pressure. In the cervicopexy operation, one uses a sling which actively pulls the uterus upwards and anteriorly during straining, and hence the sling can be called: "Dynamic sling". This occurs on account of its attachment to the abdominal wall muscles which actively tighten the sling during their contraction. This shift of the uterus in the anterior compartment of the pelvis during straining gives it additional support due to the underlying pubic bone and its rami. This also exposes the cul-de-sac to downward intra-abdominal pressure and aggravates the enterocele unless it has been very well treated during the cervicopexy operation.

There is nothing so "Holy" in the utero-sacral part of the parametrium that the slings must follow its path. Indeed considerable part of the parametrium extends laterally as: Cardinal or Mackenrodt's ligaments. A static sling can thus be fixed anterolaterally—this will greatly simplify the operation. Several modifications have

been used: viz. Fixation of the sling to the anterior superior iliac spine or the inguinal ligament. This will greatly reduce the complexity as well as the complications of the utero-sacral sling operation. One should avoid the fixation of the strips into the bones as an infection in the bone can have serious consequences. The abdominal cervicopexy operation also revealed its shortcomings after its extensive use. The strips from the anterior sheath must be 1 cm in width. A novice may take very thin strips which will not be strong enough. The fixation of these to the anterior wall of the cervix must be secure, otherwise their separation will mean a failure.

The author has modified the operation by using Mersilene Tape, fixing it posterior to the cervix. The tape then passes anterolaterally under the uterosacral ligaments, and using the same extraperitoneal route as in the cervicopexy, the sling is fixed to the anterior abdominal parietes. The fixation of the strips is done on to the anterior sheath by passing through it and knotting the tape end on itself. The enterocele is repaired efficiently by Moscowitz sutures prior to the tape fixation.

In all these operations, a proper pelvic floor repair is performed as a routine, the only exception being cases of nulliparous prolapse. With these modifications the uncertainty of the strength of the rectus sheath strips is eliminated. The posterior cervical attachment of the tape reduces the tendency to excess retroflexion of the uterus. Spontaneous vaginal delivery is usually possible; however should a caesarean section is required, the anterior wall of the lower uterine segment is free from any sling coming in the way. The dynamic sling can 'stretch' a little during the strain of labour but recovers its pull as the abdominal walls regain their tone after delivery.

In conclusion the author stresses that the Indian Obstetrician should be aware of the suitable alternative to the Manchester-Fothergill operation in a young woman with prolapse, desiring further childbearing.

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