ALL IN ONE VAGINAL OPERATION FOR PROLAPSE

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SUMMARY

"All-in-One" operation is performed in a patient of uterovaginal prolapse where childbearing is to be preserved.

It gives good results where there is 1st or 2nd degree uterovaginal prolapse with supravaginal elongation less than 1".

This operation is a combination of different surgical modalities, like -

(1) Round ligament plication through vesicouterine pouch of peritoneum,

(2) Plication of uterosacral ligaments,

(3) High plication of vesical peritoneum over fundus,

(4) Anterior colporrhaphy and posterior colpoperineorrhaphy.

Pregnancy rate is quite satisfactory. It does not interfere with outcome of labour.

Introduction

For years together, many conservative techniques have been devised to treat gynaecological problem of uterovaginal prolapse in young women of reproductive age.

Especially in a country like India where most of deliveries take place at home in rural area, prolapse uterus is very common in childbearing age group. At the same time because of high perinatal and neonatal mortality, one would like to preserve childbearing function along with correction of prolapse. An operation of prolapse preserving childbearing function is highly demanded.

Fothergill's operation or Mayo Ward's vaginal hysterectomy with AP repair fail to fulfil this requirement.

With all humbleness we have made a sincere effort to combine various wellknown surgical techniques used in the past and made a new surgical approach which fulfils all the requirements, named as "All-in-One" operation.

This operation not only preserves childbearing function but also corrects all anatomical defects of prolapse uterus.

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Principles

(a) To correct uterus into anteverted and anteflexed position by plication of round ligaments:

To correct retroversion (which is foremost requirement for the prolapse) in uterovaginal prolapse by plication of round ligaments and high advancement of vesicouterine peritoneum which will also help in maintaining anteflexion which will eventually help in increasing fertility index by bringing semen in close relation to cervix.

(b) To correct descent and hence reducing the prolapse by tightening both uterosacral ligaments along with cervix which will eventually shorten both of them.

(c) Anterior and posterior colporrhaphy: To correct cystocele and rectocele and to prevent further vaginal prolapse.

Selection of Patients

(1) Second degree prolapse + cystocele + rectocele with supravaginal elongation of cervix 1" or less;

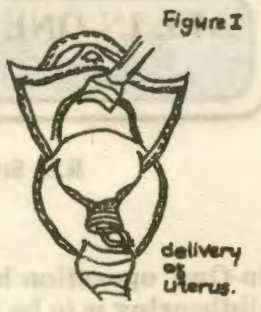
(2) Few selected cases of procedentia and more elongated cervix can also be attempted.

Procedure

Previously prepared patient, under spinal anaesthesia, in lithotomy position. Parts are painted and draped. Bladder is emptied by catheterisation. Anterior and posterior vaginal walls are retracted. Cervix is caught with vulsellum.

Anterior vaginal wall is infiltrated with normal saline + adrenaline (1 in 1 lac solution). A semilunar incision is made through the mucosa of vaginal fornix just above the portio vaginalis, but below the attachment of bladder. The bladder is freed from the anterior surface of uterus by sharp dissection upto the peritoneal reflexion. The free peritoneal fold is identified and incised. Bladder pillars are pushed up and hemostasis is achieved. Bladder is retracted.

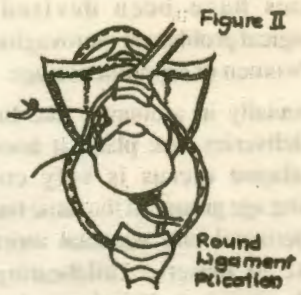
Delivery of Uterus



Delivery of Uterus

Now, by inserting two left fingers into the opened pouch, fundus of the uterus is reached and at the same time, cervix is pulled downwards and backwards with vulsellum. Thus, by hooking with two fingers, uterus is delivered out through opened anterior pouch of peritoneum.

Plication of Round Ligaments

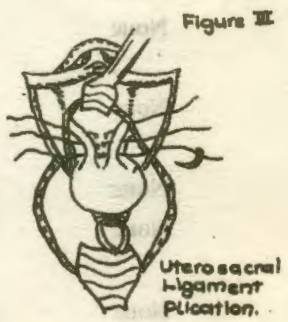


Round Ligament Plication

Now round ligaments are identified from internal inguinal ring upto the medial end as

much as possible and are plicated. Near the cornu, part of the uterus is included superficially, also another stitch is taken from the cervix below the peritoneal reflexion. No.2 silk is used or any non-absorbable material is used.

Shortening of Uterosacral Ligaments



Uterosacral Ligament Plication.

Uterosacral ligaments are identified and caught with Allis's or Babcock clamp at a point just below its attachment to the uterus and are brought together. One stitch is also taken from the posterior surface of cervix at the midline. Usually two or three stitches will be required.

Anterior Colporrhaphy

An inverted 'V' shaped incision is made through the anterior vaginal wall extending from urethral meatus to semi-lunar incision made previously. Mucosa in between the triangle is excised. Flaps of vagina are dissected as much as possible. The paraurethral and paravesical fascia are mobilised widely by blunt finger dissection using a single layer of gauze sponge. Now, from a point less than one centimetre from urethral meatus, successive vertical mattress sutures are taken in paraurethral fascia. The cystocele is repaired by similar series of No. 2-0 chromic plication sutures which are placed in the mobilised paravesical fascia. Now, the margins of vagina are approximated in midline using No. 1-0 chromic catgut sutures.

Posterior Colpoperineorrhaphy

To determine the ultimate size of vaginal orifice, two Allis's clamps are placed on inner aspect of labia minora along both the sides of outlet and approximated in midline, it should admit three fingers easily. Slightly curved, transverse incision is made posteriorly at the mucocutaneous junction between two Allis's clamps and 'U' shaped incision on the skin overlying perineal body provides better access to perineal muscles. Now, a midline vertical incision is initiated in the centre of mucosal edge by tunnelling beneath the posterior mucosa, incising the posterior free mucosa in the midline and extending the dissection to the apex of vagina. Mucosa is separated from the underlying fascia by single gauze dissection as much as possible and pararectal fascia is mobilised and medial margins of levator ani are identified. Using as many vertical mattress sutures of No.0 delayed absorbable material, pararectal fascia is then drawn over the bulging rectocele. Now, by bimanual palpation, levator muscle is identified on both the sides and plicated together with No.1 chromic catgut and two or three stitches are taken.

Vaginal margins are sutured with interrupted stitches. Two or three subcutaneous stitches are taken and perineum is formed by skin stitches.

Result and Material

In the present series, 70 patients were operated for uterovaginal prolapse by this All-in-One operation. Twenty patients were sterilised by vaginal route.

TABLE I

Post-operative Complaints

Complaint	Duration			
	On 7th day	After one month	After three months	After one year
Something coming out P/V	None	None	None	3
Urination problems				
-Difficulty in micturition	14	None	None	None
-Burning	14	3	None	None
-Stress incontinence	None	None	3	3
Defaecation problems	None	None	None	None
Sexual problems				
-Aparcunia	None	None	None	None
-Dysparcunia	None	None	None	None
Pain				
-Backache	50	None	None	None
-Lower abdominal groin pain	50	None	None	None

Because of uterosacral strain and round ligament stretching, backache and lower abdominal pain were present in about 50 patients. This pain was relieved by analgesics. It also responded well to prone position with foot-end raised.

TABLE II

Recurrence

	Duration			
	On 7th day	After one month	After three months	After one year
Without delivery				
-Descent	-	-	-	3
-Cystocele	-	-	-	-
-Rectocele	-	-	-	2
-Retroversion	-	-	-	6
After vaginal delivery				
(Total no. of vaginal delivery = 16)				
-Descent			-	2
-Cystocele			-	2
-Rectocele			-	-
-Retroversion			-	4

Burning and difficulty in micturition were present in 14 patients which responded well to antibiotic therapy.

Three patients showed stress incontinence at the end of three months which was absent before surgery.

All patients were allowed coitus after three months. None had dyspareunia or apareunia.

Recurrence rate was extremely low. Three patients showed descent, 2 showed rectocele and 6 showed retroversion at the end of one year.

All cases of recurrence were of third degree prolapse uterus with supravaginal elongation of cervix more than 1" at the time of surgery.

Sixteen patients had normal vaginal delivery. Episiotomy was given in all cases. Two patients showed second degree descent. Another 2 showed cystocele and 4 showed retroversion.

This high recurrence rate following vaginal deliveries would indicate the necessity of liberal caesarean section in all pregnant patients following repair operation.

TABLE III

Conception Rate

Conception	20
Abortion	Nil
Preterm labour	Nil
FTND	16
Caesarean section	4

From 50 patients with preservation of childbearing function, 20 became pregnant in 2½ to 3 years of follow-up.

No abortion or premature deliveries were seen.

Sixteen patients had normal vaginal delivery.

Four patients had undergone caesarean section. None was done for cervical dystocia.

Discussion

All-in-One operation seems to be an ideal operation for second degree prolapse uterus with supravaginal elongation less than 1".

Cervical length is not cut; so infertility, abortion or prematurity are not common.

Because of anatomical correction of support of uterus, the patient gets relieved of symptoms of prolapse.

Recurrence rate is very low in properly selected patients.

Fertility rate is quite satisfactory _ 40 percent fertility is established in two years of operation.

Vaginal delivery with episiotomy is possible. Dystocia of labour is uncommon, but recurrence of prolapse after vaginal delivery is seen. So caesarean section is preferable in all cases of All-in- One with full term pregnancy.

Acknowledgement

Dr. R.M. Nadkarni is an inventor of this operation. He is a pioneer worker and he taught and popularised this operation in Gujarat and many other states of India.

We are extremely thankful for his guidance and encouragements.