

Vaginal Hysterectomy for Bulky to Large Uterus

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To assess the feasibility of safety of performing vaginal hysterectomy on enlarged uteri equivalent of 8-16 weeks of gestation in size, 14 patients undergoing vaginal hysterectomy for enlarged uterus - fibroid or adenomyosis were studied at L.T.M.G. Hospital, Sion, Mumbai. Techniques used for completion of hysterectomy were bisection, coring, myomectomy or Morcellation. All 14 operations were completed successfully vaginally. In two patients bilateral salpingo-oophorectomy was also done. Mean operating time was 48.5 mins. While postoperative hospital stay averaged 4.4 days.

Introduction

Despite the evidence that vaginal route of surgery is associated with faster recovery and fewer complications, almost 50% of hysterectomies are done abdominally. The main indication for vaginal hysterectomy remains the treatment of utero-vaginal prolapse whereas the other common indications of surgery like enlarged uterus, menstrual abnormalities are treated by the abdominal route (Amrikia and Evans '79) unless associated with a significant degree of prolapse. This may be attributed to personal preference but mainly to lack of training or experience leading to a reluctance to perform the procedure by vaginal route in cases of enlarged uterus, absence of uterine descent, previous pelvic surgeries or when hysterectomy has to be combined with oophorectomy. These views are held despite the evidence that the above factors are no more than relative contraindications for the vaginal route. Various publications and numerous literature also describe the use of vaginal hysterectomy in these situations. Here we report our experience with the use of vaginal hysterectomy in case of large uterus of a size equivalent to gestation of 8-16 weeks.

Material & Methods

At LTMG Hospital more popularly known as Sion Hospital, the Dept. of Obstetrics & Gynaecology has six functional units. During 2 year study period the total number of hysterectomies in our Hospital were 1171, out of which 664 were vaginal and 507 were abdominal. In

our unit better known for its vaginal work, out of total of 368 hysterectomies 283 were done vaginally. This data does not include radical hysterectomies done for malignancy. In this paper we have analysed 14 patients where vaginal hysterectomy was done in a bulky uterus of a size equivalent to a gestation of 8-16 weeks (Table I).

Table I
Materials and Methods

	Overall (6 Units)	Dr. V. R. Ambiyee Unit.
Total hysterectomies (2 yrs. study period)	1171	368
Vaginal Hysterectomy	664 (56.7%)	283 (77%)
Abdominal hysterectomy	507 (43.3%)	85 (23.1%)

Analysis of 14 cases of vaginal hysterectomy for bulky & enlarged uterus of size equivalent to 8-16 wks. gestation.

Most of the patients were in the age group of 40-45 years and were parous, a favourable factor for the vaginal route of surgery (Table II).

Table II
Age & Parity

Age (Yrs)	No. of Pts.	Parity	No. of Pts.
35-40	2	1	1
41-45	7	2	2
46-50	3	3	4
50 & above	2	3 & More	7

Majority had complaints of menstrual irregularities and pain in abdomen. Only one patient had complaints suggestive of prolapse, One patient had a past history of

LSCS. Apart from second degree prolapse in one symptomatic patient, 3 more patients had first degree prolapse on per speculum examination. Clinically the largest size of uterus was equivalent to 15-16 weeks (Table III), Clinically all cases had mobile uterus, Pre-op D & C / Cervical biopsy / Pap smear was done to rule out any uterine or cervical malignancy. Pre-op sonography was done to confirm the diagnosis; in our series 10 cases had fibroid and 4 cases had symmetric enlargement of uterus suggestive of adenomyosis. Sonography also helped to know the site, size and number of fibroid as well as to rule out any adnexal pathology which was helpful in planning of the sos abdominal hysterectomy was taken in all cases. All operative procedures were done by our Unit Chief or Lecturer.

The Surgery was done in the usual fashion. Suitable anaesthesia either general or spinal was given. Proper lithotomy position was given and parts painted and draped. Catheterisation was done. Cervix was held with volsellum. Saline - Adrenaline infiltration was done. Circumferential incision was taken and bladder was dissected. Anterior and posterior pouches were opened. Uterosacral/Cardinal ligaments were clamped, cut and transfixed. Uterine vessels were Clamped, cut and ligated. The next step depended on the size and characteristic of the uterus and included bisection, myomectomy, morcellation and Lash technique (Coring). It is very important that all these techniques are carried out only after securing uterine vessels as the operation becomes relatively bloodless after this. Fortunately, relationship of uterine vessels with isthmus remains unchanged even after enlargement of uterus making it easier to clamp it vaginally than abdominally.

Bisection

Bisection was the most frequently used technique in all but one patient. Cervix was grasped by volsellum bilaterally and uterus was bisected in anteroposterior direction with knife with progressive reposition of volsellum till the fundus was reached and pedicles clamped. In a few cases complete bisection was required so that one half of the uterus could be delivered out into

the vagina and pedicle secured. Apart from taking off tension of the infundibulopelvic ligament allowing the descent of the uterus it also helps in removal of small myomas during the course thus reducing the bulk of the uterus. The protection of bladder, rectum and vagina is very important in such procedures.

Myomectomy

Myomectomy was usually combined with bisection or morcellation. It was continued only till further descent of the uterus could be achieved.

Morcellation

Morcellation of large fibroid was done in one case along with bisecting of uterus helping in decreasing the bulk and delivery of the uterus into the vagina.

Lash Technique (Coring)

In Lash procedure (Lash 1941) the uterine wall was cut circumferentially few mm at a time maintaining constant traction of the cervix all the time. As the fibres are cut the uterus elongates. The next series of incisions are given at a higher level till the fundus could be delivered out.

Only bisection was required in 8 patients while Lash technique was sufficient in one patient of adenomyosis of 14 weeks size uterus (Table 4).

Table IV

Techniques Used	No. of Cases
Only Bisection	8
Bisection with myomectomy	4
Bisection with myomectomy with Morcellation	1
Lash Technique (Coring)	1

Once the uterine fundus could be delivered into the vagina the hysterotomy was completed in the usual fashion. Bilateral salpingo-oophorectomy was done in 2 patients. Thus in all 14 patients the procedure could be successfully completed vaginally. Post-op care was routine with post-op antibiotics.

The average operating time was 48.5 minutes with a range of 35-130 minutes. One patient required post-op blood transfusion. Two patients had macroscopic hematuria which cleared off within 24 hours. There were no other intra-op or post-op complications. The average hospital stay was 4.4 days (Table 5.)

Table V

Results

Average operating time	48.5
Blood transfusion	1 pt.
Macroscopic hematuria	2 pts.
Bilateral Salpingo-oophorectomy	2 pts.
Average hospital stay	4.4 days.

Discussion

Though our experience of vaginal hysterectomy in large uterus is very limited the literature describes numerous publications in this field. The Magos et al(1996) in his series removed large uteri weighing more than 1000 grams vaginally. This clearly shows that vaginal hysterectomy should be considered even in cases of considerable uterine enlargement as it offers the women several benefits over abdominal surgery in terms of shorter anaesthesia, shorter operating time, reduced hospital stay, less morbidity and less cost. (Richardson 1995).

Though laparoscopic surgery offers an alternative with its less invasive nature and its short hospital stay the operative time and cost is much more. Also bladder and ureteric injuries are more frequent in laparoscopic and abdominal surgeries (Richardson 1995).

But for success in such difficult vaginal procedures proper selection of patients is important. Important consideration in such situations are good vaginal vault access may be reduced in nulliparous, morbidly obese and some

postmenopausal patients. Uterine fixity or gross pelvic pathology should be ruled out by history or clinical examination before attempting vaginal surgery. Post multiple pelvic operations can pose a problem with dense adhesions. Magos et al (1996) and others have recommended the use of laparoscopy to rule out adhesions in such conditions prior to vaginal surgery.

For proper vaginal vault access correct lithotomy position with well abducted and flexed hips is important. This allows the assistant to stand inside the patient's legs giving an unobstructed view of the operating site allowing proper retraction.

The vital role of the two assistants can hardly be overemphasized. As everybody knows a poor assistant can make an easy job difficult and a difficult job almost impossible while a good assistant can make a difficult hysterectomy look relatively simple.

As Campbell (1946) said "The bulk of the uterus to be removed is not a contraindication to the vaginal route." Within limits these words are true even today. Moderate enlargement of the uterus should not be looked upon as contraindication to vaginal hysterectomy and should certainly not be used to justify the use of abdominal and laparoscopic surgery.

References:

1. Amirikia H., Evans T.N. Am. J. Obst. & Gyn. 134; 431, 1979.
2. Campbell S.B. Am. J. of Obst. & Gyn. 52; 598: 1946.
3. Lash A.F. Am. J. of Obst. & Gyn. 42; 452: 1941.
4. Magos A., Boyiras N., Sinha R., Richardson R. Brit J. of Obst. & Gyn, 103, 246, 1996.
5. Richardson R.E., Bournas N., Magos A.L. Lancet 345; 36; 1995.