

Purohit technique of vaginal hysterectomy: a new approach performed in 214 patients

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Keywords

Purohit technique of vaginal hysterectomy.

ABSTRACT

Objectives To study the feasibility, safety and efficacy of the newly designed Purohit technique for vaginal hysterectomy.

Design Prospective observational study.

Setting Urban private hospital.

Methods The study involved 214 consecutive patients without prolapse. Inclusion criteria were: all benign disease of the uterus with a uterus of up to 20 weeks' gestational size; patients were also included who had relative contraindications to the vaginal hysterectomy route, and who needed removal of movable adnexal cyst (5–7 cm) or oophorectomy. Patients with endometriosis were excluded. Initially, vaginal hysterectomy was attempted in all patients included in the study, by means of the Purohit vaginal hysterectomy technique. Uterine arteries were secured by means of the Purohit uterine artery technique.

Outcome measures These were: intraoperative and postoperative complications, duration of operation, need for laparoscopic assistance, postoperative pain, duration of hospital stay and readmission.

Results The mean (\pm SD) weight of the removed uteri was 191.91 ± 101.52 g (range 40–950). Vaginal hysterectomy was successfully completed in 213 consecutive patients (99.53%), and failed in only one patient (0.46%) in whom laparoscopic assistance was needed to release the upper ligaments. Morcellation was required in 13.55%. Vaginal salpingo-oophorectomy was completed without difficulty in all 24 attempted procedures, including two patients with twisted ovarian cyst. Intraoperative bleeding was less than 100 ml in 87.85% of patients; 0.93% required blood transfusion. The mean haemoglobin loss was 0.5 g dl^{-1} (0.2–4.0). No major electrical injury occurred. The mean (\pm SD) operating time was 60.6 ± 26.53 min (25–180). Mild postoperative pain was experienced by 98.59% of patients, and the mean hospital stay was 2.7 ± 1 days (1–10). In the second postoperative week, 2.33% of patients developed haematocoele above the vault of size 20–100 ml; two patients required readmission for drainage of the haematocoele.

Conclusion The Purohit technique is safe, and 99.53% of women with benign disease of a uterus of up to 20 weeks' gestational size, excluding endometriosis, underwent vaginal hysterectomy, with or without salpingo-oophorectomy, carried out by means of this technique.

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INTRODUCTION

Many patients who undergo total abdominal hysterectomy and laparoscopically assisted vaginal hysterectomy could probably have undergone a total vaginal hysterectomy instead.¹ In spite of the lower morbidity and faster recovery² offered by vaginal hysterectomy only 25–40%³ of hysterectomies are performed by the vaginal route using the conventional technique. Although the feasibility rate for vaginal hysterectomy is 79%,⁴ the approach requires greater skill and the gynaecologist has to be familiar with surgical techniques.⁵ Thus many surgeons do not feel comfortable with this route for hysterectomy, particularly where there are relative contraindications,⁶ such as large uterus, nulliparity, inadequate access, previous Caesarean delivery and pelvic laparotomy, and if ovaries are to be removed. If it were possible to carry out vaginal hysterectomy using an easier and more obvious technique for accessing the parauterine space, with minimal use of thick clamps, sutures and morcellation procedures, and with better illumination of the deeper pelvis, then the proportion of hysterectomies performed vaginally by gynaecologists would be increased. Therefore, the techniques of vaginal hysterectomy need some refinements.

The concept of 'above downwards' shaving of the uterine attachments, using electrocautery and scissors, as applied during total laparoscopic hysterectomy,⁷ engendered for us the notion of 'below upwards' shaving of the attachments of the uterus at vaginal hysterectomy, using electrocautery and scissors and the help of a right-angled forceps as elevator, retractor and hook. Similarly, the way in which a telescope with light source is used in laparoscopy gave us the idea of illuminating the deeper pelvic organs, such as the infundibulopelvic ligaments and ovaries, by telescope with the light source from below during vaginal hysterectomy. Thus we have developed a particular approach, the Purohit technique for vaginal

hysterectomy, which is described below, and we have studied its feasibility, efficacy and safety with regard to facilitating intraoperative access.

MATERIALS AND METHODS

A prospective observational study was carried out in our urban private hospital between August 1999 and April 2002. The study involved consecutive procedures in 214 fit women, none of whom had prolapse, who requested hysterectomy for different benign uterine diseases (Table 1). Participants were selected irrespective of parity, obesity, parametrial scarring, configuration of uterus, history of previous abdominal and vaginal operations, or need for removal of movable adnexal cyst (5–7 cm) or oophorectomy (Table 2). Exclusion criteria were uterine size of more than 20 weeks' gestation, known endometriosis and malignancy.

On the assumption that vaginal hysterectomy would be feasible in all the participants included in the study,

Table 1 Indications for hysterectomy among 214 study participants*

Indications	n	%
Fibroid uterus	82	38.31
Fibroid with early pregnancy	2	0.93
Large cervical fibroid	2	0.93
Dysfunctional uterine bleeding	46	21.49
Adenomyosis uterus	20	9.39
Ch. cervicitis	27	12.61
Ch. pelvic inflammatory disease	24	11.21
Postmenopausal bleeding <i>per vaginam</i>	8	3.73
Uterine polyp	10	4.67
Cervical polyp	10	4.67
Ovarian cysts including two twisted cysts	9	4.20
Hydrosalpinx	1	0.46

*A few women had more than one indication.

Relative contraindication	n	%
Nulliparity	4	1.86
Retracted, pulled-up cervix with poor access (difficult cases)	22	10.28
Fibroid with early pregnancy	2	0.93
Large uterus of 12–20 weeks' gestational size ¹	22	10.28
Large uterus weighing >180 g ⁶	87	40.65
Previous Caesarean section, abdominal or vaginal operation	27	12.61
Pain in lower abdomen	31	14.48
Need for removal of adnexal cyst (5–7 cm), including two twisted ovarian cysts and oophorectomy	27	12.61

*A few women had more than one feature.

Table 2 Patients with relative contraindications to vaginal hysterectomy, among 214 women*

the Purohit technique of vaginal hysterectomy, called after the present author, Dr R. K. Purohit, was initially attempted in all these patients as described below. Success, failure and safety were evaluated on the basis of intraoperative and postoperative complications, duration of operation, need for laparoscopic assistance, postoperative pain, resumption of diet, duration of hospital stay and readmission.

Principles of the Purohit technique of vaginal hysterectomy

- 1 The vaginal walls are incised using monopolar current (30–35 watts).
- 2 Lateral attachments and adhesions are desiccated using bipolar current (45 watts)⁸ close to the uterus, and are divided by scissors. Clamps are not used. Uterine arteries are secured extraperitoneally using the novel Purohit approach for the uterine artery.
- 3 Right-angled forceps are used throughout to elevate, hook, stretch and retract from their posterior aspects all the lateral attachments and vessels; tissues were desiccated and divided between the prongs of forceps.
- 4 Conventional volume reduction manoeuvres are used to reduce the volume of large uteri, to create the parauterine space needed to approach the lateral attachments.
- 5 Suture is only used to attach Mackenrodt's ligament to the vaginal vault and for vault closure.
- 6 A 10-mm telescope with a light source is used as a torch, if needed, to illuminate the deeper and darker parts of the pelvis, and during vaginal salpingo-oophorectomy using electrocautery and scissors.
- 7 Laparoscopy is reserved as a standby, for assistance in failed vaginal hysterectomy and salpingo-oophorectomy procedures, and thus for post-hysterectomy salpingo-oophorectomy if needed.

Steps in the standard procedure

Vaginal hysterectomy was commenced in the standard manner.^{9,10} A vasopressure agent, such as 3 drops of injection adrenaline (1 in 1000 strength) mixed with 30 ml normal saline was infiltrated locally. A semilunar incision was made in the anterior vaginal wall using cutting current (30–35 watts). The bladder wall was separated. The anterior cul-de-sac peritoneum was kept intact until the uterine arteries had been secured extraperitoneally. The posterior vaginal wall was then incised by cutting current. Holding the incised posterior vaginal wall by means of Allis forceps in one hand, the index

finger of the other hand was used to push up the peritoneum of the POD. The posterior cul-de-sac peritoneum was kept intact. The speculum was enhanced further. After adequate traction on the cervix, and countertraction with the bladder retractor anteriorly and the speculum posteriorly, the prominent lateral vaginal walls on both sides were incised to join the anterior and posterior semilunar incisions and to expose the ligaments on either side. The vaginal skin was not peeled up from the surface of ligaments. A suction cannula was used to remove blood during operation.

A straight bipolar forceps with a fine tip was prepared by removal of insulation from about 1 cm from the tip. The tip of the bipolar forceps was inserted through the lateral incision, and the vesicocervical-cardinal-uterosacral ligaments were desiccated close to the cervix, in small bites with bipolar current (45 watts), and were divided by scissors. At every step of the operation, only coagulated tissues were divided. Desiccation was started from the vesicocervical ligament and proceeded backwards. The tip of a right-angled forceps was used to elevate the ligaments from the posterior aspect. Smaller bleeding arterioles were coagulated. No clamp was used. No suture was used to tie the ligament. The divided end was then pushed by index finger along the lateral uterine wall in the direction of the ascending branch of the uterine artery, to expose the bulge of the tubular uterine artery.

Occasionally that portion of the uterine artery was found to be covered by a fibrous sheath. The sheath was dissected from the posterior aspect using right-angled forceps and the fiber bands were desiccated and divided to expose the bulge of the uterine artery. If needed, Babcock forceps were used to stabilize the tortuous uterine artery.

The bulge of the artery was hooked from its posterior aspect, with the tip of the right-angled forceps inserted between it and the uterine wall. It was stretched; spread between the prongs by opening the mouth of the right-angled forceps; desiccated with bipolar current, passed through an ordinary bipolar forceps or a standard laparoscopic bipolar forceps inserted between the prongs of the right-angled forceps, and was divided by scissors. We have termed this the Purohit approach to the uterine artery, after the present author Dr R.K. Purohit. This was our original work, and the interesting step of the operation. We did not use clamps. Ordinary bipolar forceps were preferred, achieving better coaptation^{8,11} by manual pressure than the spring-operated laparoscopic bipolar forceps. Two to three applications of coagulation on the arterial wall were better for achieving good haemostasis. The bleeding end, if any, of the artery was held by

one artery forceps and the proximal part was coagulated to achieve complete haemostasis. The divided end of the uterine artery, with soft tissue, was pushed upwards and outwards with the index finger. The divided lower end of the ascending branch on the side wall of uterus was identified, to confirm the division of the uterine artery.

The above procedures were repeated on the other side to secure the uterine artery.

The posterior cul-de-sac peritoneum was then incised. A speculum was enhanced into the cul-de-sac. The posterior peritoneal fold, with a few fibres of the cardinal ligament on either side, was hooked by right-angled forceps from the posterior aspect, desiccated close to the uterine wall, divided and pushed up by the index finger to enhance the descent of the cervix. The anterior cul-de-sac was then incised. The peritoneal folds, and the round lig. ovarian lig. tube on either side were desiccated from below upwards by means of bipolar current and were divided by scissors. Right-angled forceps were used to hook them, usually from the posterior aspect and occasionally from the anterior aspect. We did not use clamps. Occasionally the tip of the right-angled forceps was used to push the wider cornual part to the opposite side to obtain space for the bipolar forceps and scissors. Use of the long arm of the laparoscopic bipolar forceps was particularly advantageous in obese women with a deep pelvis. A 10-mm telescope with a light source was occasionally used as torch to illuminate the deeper sites such as the round lig. ovarian lig. tube and infundibulopelvic ligament in obese women. No ligation or stay suture was used up to that stage.

After removal of the uterus, any sites of oozing from the side wall were identified by advancing two Allis tissue forceps up the posterior peritoneal fold of the broad ligament towards the ovarian stump and tube, under good illumination by telescope and light source. Oozing areas were coagulated. We did not close the peritoneum. Adequate pulling back of the incised vaginal walls using retractors exposed the tip of the desiccated Mackenrodt's ligament on either side, bleeding arterioles were coagulated, and then it was pulled by Allis forceps and anchored to the vaginal vault using Vicryl no. 1 sutures. The vault was closed, also using Vicryl no. 1 sutures.

Routine vault drainage by corrugated drain was given for 12 h, and routine continuous catheterization was done for 12 h using a no. 9 infant feeding tube. The tube was fixed to the medial side of the thigh and connected with an infusion set into the urobag. Routine prophylactic antibiotic, an antiemetic (ondansetron 4 mg, single dose) and ranitidine were given. Women with hemorrhage of 100–250 ml underwent infusion with 500 mL of plasma expander (polymer from degraded gelatin 3.5%

w/v) routinely after operation. Patients were followed up in the hospital and once after discharge, at 2 weeks.

Modifications for large uterus, other difficult cases and salpingo-oophorectomy

In women with a large uterus, conventional volume reduction manoeuvres^{6,12,13} such as bisection, myomectomy and morcellation etc were done to complete hysterectomy.

In the case of a high retracted cervix with high POD, the POD was opened initially while incising the posterior fornix, and release of the Mackenrodt's ligament on either side was carried out first to enhance descent of the cervix and uterus before advancing up towards the uterine artery intraperitoneally. Where the POD could not be opened because of its high position, extraperitoneal dissection was carried out to reach the peritoneal cavity. The use of the right-angled forceps was especially advantageous in such cases.

For salpingo-oophorectomy, after division of the cornual components, the ovarian ligament was held by Allis forceps. The bladder was catheterized to increase the space available in the pelvis, and the patient was put in the head-down position to keep the bowels away from the operating field. Sufficient wet ribbon gauze packing was inserted to push the guts away. The portion between the round ligament and tube was stretched by Allis forceps and incised to split the broad ligament, to separate the tube and ovarian ligament from the round ligament and the upper part of the broad ligament. Small bleeders, if any, were cauterized. In patients where there was adequate visibility up to the upper pole of the ovary and infundibulopelvic ligament, desiccation and division carried out in small bites to remove ovary and tube. In patients where there was poor visibility up to the upper pole of ovary, because of obesity, shortness of the infundibulopelvic ligament, cyst or adhesion, a thin rigid torch such as a 10-mm telescope with light source was used to illuminate the pelvic structures. If it was not possible to reach the infundibulopelvic ligament then both organs were removed separately. The ovary was detached from the mesovarium¹⁰ first, then the tube was excised after coagulation and division of the infundibulopelvic ligament. The tip of a right-angled forceps was used to hook and stretch the adhesions and infundibulopelvic ligament, to bring them into the operator's view and away from the gut, before coagulation and division between the prongs. The use of long bipolar forceps or laparoscopic bipolar forceps with thin apposed prongs was preferable in obese women. Desiccation needed to be done far enough away from the lateral pelvic wall to

Table 3 Associated operation procedures

Procedures	n	%
Bisection, myomectomy, morcellation	29	13.55
Salpingo-oophorectomy and adnexal cystectomy	24	11.21
Post-hysterectomy laparoscopic bilateral salpingo-oophorectomy	3	1.40
Adhesiolysis of intestine, omentum and other from fundus and tubes	6	2.80
Post-hysterectomy, diagnostic laparoscopy	34	15.88

Table 4 Success and failure of Purohit technique of vaginal hysterectomy

	n	%
Vaginal hysterectomy successfully completed	213	99.53
Conversion to abdominal hysterectomy	0	0.00
Failure to advance after securing uterine arteries	1	0.46
Laparoscopic assistance required to release upper ligaments	1	0.46
Uterine arteries secured vaginally by the Purohit approach	214	100.00

avoid injury to the ureter. Smaller bites of desiccation and slow division by scissors could avoid bleeding. For patients with very short infundibulopelvic ligaments and in whom vaginal salpingo-oophorectomy failed, post-hysterectomy laparoscopic salpingo-oophorectomy was done after clamping the vaginal vault with two Allis tissue forceps to reduce gas leakage. The excised tissues were easily removed through the vagina.

Following hysterectomy, double-puncture laparoscopy was done to evaluate the desiccated stumps abdominally for study purposes and if needed.

RESULTS

The heaviest woman encountered in our study weighed 107 kg. Four (1.86%) were nulliparous; another 171 (79.90%) were multiparous. The indications for vaginal hysterectomy are listed in Table 1. The commonest indication was fibroids (40.17%), including two cases of large cervical fibroid (0.93%) and two of fibroid with early pregnancy (0.93%). Table 2 shows the variety of presentations, including those where there were relative contraindications to vaginal hysterectomy: 27 women (12.61%) had a history of previous abdominal and vaginal surgery, including one who had undergone hysteroplasty with longitudinal vaginal septum resection; there were two cases of Fothergill's repair, and two women who had twisted ovarian cyst of size less than 10 cm.

Table 3 shows the different associated procedures which were carried out. Vaginal salpingo-oophorectomy was done in 24 patients (11.21%) out of the total of 27 in whom it was indicated, including in two women with twisted ovarian cyst less than 10 cm in size. The mean operating time for unilateral vaginal salpingo-oophorectomy was 14.09 minutes (6–55). Diagnostic laparoscopy

following hysterectomy showed no organ injury; the stumps were well desiccated and similar to stumps desiccated using a standard laparoscopic procedure.

Table 4 summarizes the successes and failures of the Purohit technique for vaginal hysterectomy.

Table 5 shows the intraoperative complications. There was no major electrical injury to neighbouring organs. Oozing from the desiccated and severed Mackenrodt's ligament, requiring repeat desiccation, was a relatively common complication after removal of uterus.

Table 6 shows the mean values among the patients for age, uterine weight, operating time, haemoglobin loss at the third postoperative day, time to resumption of liquid diet, duration of hospital stay and readmission rate.

Table 5 Intraoperative complications

Complications	n	%
Haemorrhage, ml		
<100	188	87.85
100–250	24	11.21
700–1500	2	0.93
Blood transfusion	2	0.93
Cystostomy	2	0.93
Other	0	0.00

Table 6 Patient and operation details

Mean age \pm SD (range), years	42.80 \pm 6.80 (23–65)
Mean uterine weight \pm SD (range), g	191.91 \pm 101.52 (40–950)
Mean operating time, min	60.60 \pm 26.53 (25–180)
Mean haemoglobin loss, g dl ⁻¹	0.5 (0.2–4.0)
Time to liquid diet resumption, hours	3
Mean hospital stay \pm SD (range), days	2.7 \pm 1 (1–10)
No. of readmissions in second week	2 (0.93%)

Complications	n	%
Postoperative pain	211	98.59
Mild for 24 h	3	1.40
Moderate pain	0	0
Severe pain	1	0.46
Bladder wall injury detected after removal of catheter	4	1.86
Superficial burn ulcer to vulval skin of less than 1 cm each	1	0.46
Drug-induced hepatitis requiring readmission	5	2.33
Vault haematocoele of 20–100 ml in second week following operation	2	0.93
Pyrexia	5	2.33
Cystitis	0	0
Retention of urine	1	0.46
Inadequate urge for micturition	0	0
Other	0	0

Table 7 Postoperative complications

Table 7 shows the postoperative complications. One patient with a history of hysteroplasty with longitudinal vaginal septum resection, developed leakage of urine through the vault after removal of the catheter at 12 h after operation; this was managed by continuous bladder catheterization for 8 weeks. Five patients (2.33%) developed pelvic haematocoele of size 20–100 ml size above the vault which was detected by sonography in the second week after operation; two of these patients (0.93%) required readmission and drainage under ultrasonographic guidance, while the others were managed conservatively.

DISCUSSION

We were successful in detaching the lateral attachments and completing hysterectomy vaginally in 99.53% of consecutive patients and failed in one patient (0.46%), in contrast to the feasibility rate of 79% and failure rate of 1.8%, in carefully selected cases, reported by Crosson⁴. In only one patient (0.46%) did we fail to advance after securing the uterine arteries, because of severe adhesion in the POD and a large uterus of 14 weeks' gestational size. Thus we needed laparoscopic assistance to release the upper ligaments before finally removing the uterus vaginally. All the instances of poor access were managed successfully using our technique. It was observed that in most of the uteri weighing less than 280 g, volume reduction manoeuvres were not needed; thus only 13.55% of women required bisection and morcellation. Thus relative contraindications⁶ to vaginal hysterectomy were not a bar to our technique. The high feasibility rate for vaginal hysterectomy in our study was achieved mainly on account of the following factors: the advantage of using right-angled forceps in our technique; the use of thin instruments such as the bipolar forceps; the use of a telescope with light source as a thin torch for illumination;

the Purohit approach to uterine arteries, and conventional volume reduction manoeuvres for large uteri.

We did not remove ovaries routinely unless this was indicated. However salpingo-oophorectomy was done in the 27 patients (12.61%) in our study where it was indicated; in 24 (11.21%) by the vaginal route, and in three (1.40%) using a laparoscopic approach. We successfully completed vaginal salpingo-oophorectomy in all the instances where it was attempted. In 1.40% of patients, laparoscopic approach was done liberally because we had to do a diagnostic laparoscopy following hysterectomy; hence these did not represent failure of the vaginal approach. Thus, using our technique, the vaginal approach was feasible in all cases and without complication. Laparoscopic salpingo-oophorectomy following hysterectomy was also easier and took less time as desiccation and division of only the infundibulopelvic ligament was required in a pelvic cavity without a uterus.

Post-hysterectomy diagnostic laparoscopy was not required routinely in all patients. It was carried out randomly in 34 patients cases to laparoscopically determine the safety of our technique. However port-site pain was troublesome to the patients who underwent laparoscopy.

Intraoperative and postoperative complications were less in our study. Intraoperative haemorrhage and subsequent postoperative haemoglobin fall were less in the majority of cases. Only two patients required blood transfusion; in one bisection and removal of a large central cervical fibroid of size 9.4 cm was needed before the uterine arteries were secured, and the other patient had a uterus of 800 g which required morcellation. Thus a large cervical fibroid might be a cause for concern in vaginal hysterectomy. There was no complication associated with hysterectomy in the patients with fibroid with early pregnancy. It was observed that only 31 cm suture was required for vault suspension and vault closure using our

technique. No patient has reported vault prolapse in the last two and half years. Vaults were seen well hooked at both the angles by cardinal ligaments. The mean operating time in our study of 60.6 min is comparable to that found in other studies, although the operating time is influenced by the volume reduction manoeuvres and by each additional operative procedure. Unger *et al.*¹³ reported that there was a linear relationship between uterine weight and operating time (66.6 ± 26.2 min for large uteri vs. 53.0 ± 25.5 min for uteri weighing less than 200 g).

The mean postoperative hospital stay of 2.7 days in our study was less than that reported in other studies by Dorsey *et al.*¹ (3.5 days) and Magos *et al.*¹² (3.7 days). The mean hospital stay could have been reduced still further in our study, as for social reasons many women stayed in the hospital longer than needed.

Vaginal hysterectomy has two components. The first involves detaching all the attachments including the vaginal walls. The second is the reduction of uterine volume in the case of a large uterus, to create the parauterine space needed to approach the lateral attachments. Our technique had mainly taken care of the lateral attachments of the uterus. We have been using electrocautery in vaginal hysterectomy originally since November 1997.¹⁴ Often we revised our technique with the learning curve and found at the steep that the watts of current used by us, with the operating techniques we adopted, and with adequate exposure of target tissue and its desiccation close to the uterine wall under direct vision, serious electrical injury was avoided in our study.

Traction by the assistant was not required very much with our technique, because the tip of the right-angled forceps was used by the left hand to elevate the ligaments from the posterior aspect, for easy application of the bipolar forceps with the right hand. This reduced fatigue in the assistant and postoperative pain in the patient. The released Mackenrodt's ligaments did not retract back or missed in any patient. Instances of high retracted cervix with a high POD where the cervix did not move down at all on traction under anaesthesia, even after the vaginal walls had been detached, were categorized as difficult cases with very poor access. With our technique, manoeuvres using the right-angled forceps bring down the cervix, uterus, and anterior peritoneum to the operator's view, facilitating access and further advance. We found that the difficulty of application of a thick clamp and needle-holder with needle, encountered using the conventional method in such cases of poor access,¹⁵ could be solved using our technique. Adhesions in the POD were also divided close to the uterus, further helping to

bring down the uterus. Therefore, poor access was not a contraindication with our technique.

The Purohit approach to the uterine artery was an easier and quicker method for accessing, identifying, dissecting and skeletonizing the uterine artery, even where the uterus was rotated or distorted because of myoma, and its desiccation under direct vision between the prongs of the right-angled forceps further increased confidence and reduced intraoperative haemorrhage and the risk of injury to ureters. The intraoperative safety of the uterine artery was promising in this technique, without the use of suturing. Also, no postoperative haemorrhage from the uterine artery occurred in our study. It was found that the bulge of the artery was the elbow portion of the uterine artery before becoming ascending branch, and it was hooked by the bend of the right-angled forceps. It was observed that the divided proximal end protruded towards the surgeon's view rather than retracting. The divided lower end of the ascending branch, on the side wall of uterus, must be identified to confirm the division of the uterine artery. An intact uterine artery was suspected when the oozing continued and the soft tissue of the broad ligament did not move freely up along the side of uterus while being pushed by the index finger. Hooking of the upper border of the broad ligament and tube, and the infundibulopelvic ligament brought them into the operator's view and retracted them away from the intestines.

Conclusion

Thus, the Purohit technique of vaginal hysterectomy is a feasible, safe and effective method for carrying out vaginal hysterectomy and salpingo-oophorectomy for almost all cases of benign disease in uteri up to 20 weeks' gestational size, irrespective of pre-existing conditions listed as relative contraindications to vaginal route, excluding endometriosis. This technique promises the advantages of a high success rate, reduced need for laparoscopic assistance with a low requirement for volume reduction manoeuvres, less intraoperative and postoperative bleeding, only mild postoperative pain, and early discharge from hospital thus reducing cost and complications. It can be learned easily from a video which can be obtained free of charge from the author on request.

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