



NON-DESCENT VAGINAL HYSTERECTOMY VERSUS TOTAL ABDOMINAL HYSTERECTOMY: A COMPARATIVE STUDY

Obstetrics & Gynaecology

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KEYWORDS

INTRODUCTION

Hysterectomy is the most common procedure performed in gynaecology department. The route of hysterectomy for a particular patient depends upon various factors like vaginal shape and accessibility of uterus, size and shape of uterus, uterine mobility, pelvic adhesions, extent of extra-uterine disease, cost effectiveness, surgeon's training and experience, available hospital technology, devices and support and preference of informed patient.

Vaginal hysterectomy is better over abdominal by a shorter duration of hospital stay, faster ambulation, better functional capacity and better pain score. Other benefits of vaginal approach are shorter operating time, lower overall costs and more patient satisfaction.

Non descent vaginal hysterectomy requires less surgical techniques as compared to laparoscopic. Learning curve for the NDVH is also less as compared to laparoscopic and robotic assisted hysterectomy. The aim of our study was to assess the feasibility and best route of hysterectomy amongst non-descent vaginal hysterectomy versus total abdominal hysterectomy.

METHODS

This retrospective study was conducted in department of obstetrics and gynaecology for a period of 12 months in AIIMS Rishikesh. 55 women who underwent hysterectomy for benign uterine disorders other than prolapse uterus were included in the study. Out of 60 patients, 25 underwent abdominal hysterectomy and 35 women were subjected to vaginal hysterectomy.

Inclusion criteria were non descent uterus with benign pathology, AUB, fibroid, cervical polyp, adenomyosis. Uterus with good mobility and uterus size <20 weeks. All the women with uterine size larger than 18 weeks immobile uterus, severe endometriosis, complex adnexal mass and suspected or diagnosed malignancy were excluded from the study. The primary outcome measures compared were time of operation, blood loss, post-operative pain, duration in hospital, febrile morbidity and postoperative systemic infections. Pain was assessed by VAS pain score. Blood loss was estimated by the number of mops soaked after surgery. The data was recorded and checked from old records of the hospital. The time taken for doing vaginal hysterectomy was calculated from incision at cervicovaginal junction to vault closure. Operating time for abdominal hysterectomy was calculated from abdominal to skin closure.

RESULTS

Commonest indication for NDVH was fibroid uterus in our study. 3 patients were nulliparous and rest all were parous. Uterine size in the majority of cases was more than 10 weeks in size. Mean duration of surgery was 1 ½ hours. Mean blood loss was minimal. Four cases were converted to laparotomy, one due to slippage of ovarian vessels while doing salpingo-oophorectomy and were due to difficulty in ligating uterine artery on account of multiple fibroids. There were no intraoperative complications such as bladder, rectum or urethral injuries. Average duration of hospital stay was 2-3 days. Early catheter removal was done in all the cases. Paralytic ileus was less in vaginal hysterectomy patients.

Early ambulation and oral intake reduced postoperative complications (Table-1). Similarly, a significantly higher blood loss was noted in the abdominal hysterectomy group, compared to the vaginal group. Postoperatively, the abdominal group required more analgesia in

comparison to the vaginal group as measured by number of days requirement of analgesics postoperatively and the pain score. Mean time to postoperative mobility and mean maximum postoperative body temperature in the vaginal hysterectomy group were significantly shorter and less severe respectively than those in the abdominal group ($p < 0.05$). Significantly lesser number of patients required postoperative blood transfusion in the vaginal group compared to the abdominal group.

DISCUSSION

Hysterectomy is the commonest major operation performed by a gynaecologist through various techniques.

Surgeries performed by laparoscopic route are associated with increased surgery time and rise in the incidence of intraoperative injuries. Bulky uteri, endometriosis, pelvic inflammatory disease, previous surgeries, and narrow vagina make vaginal hysterectomy once considered to be contra-indications for non-descent vaginal hysterectomy is now an easy task. In obese women this route is better. Four readmissions following discharge were encountered, three required further treatment, two (TAH 1, VH 1) returned to theatre for drainage of vault haematoma and one (LAVH) had re-suturing of an umbilical incision. One (LAVH) was taken for drainage of vault haematoma and one (TAH) for drainage of abdominal wound haematoma⁵. In the study by Mehta et al.⁶ which is similar to our study, fibroid was also the most common indication. Pain was less in group II patients in this study with non-descent vaginal hysterectomy (NDVH). This was similar to the observations by Dhiyya and Gharipalia⁷ and Chakraborty et al.⁹.

The mean hospital stay was 3.5 days (3 – 10 days SD 1.4) in the VH group compared to 6.9 days (5 – 15 days SD 2.03) in TAH⁶. In Patients requiring hysterectomy for benign non prolapsed cases vaginal route may be preferred route as it is less invasive, with minimal or no complications, more economical and effective mode of therapy. The complications in abdominal hysterectomy in this study were febrile morbidity (12%), wound infection (7%), UTI (6%), respiratory infection (8%) and paralytic ileus (6%) which was significantly higher than non descent vaginal hysterectomy. Faster recovery was seen in patients operated by non descent vaginal hysterectomy¹⁰.

Good operative skills helps to accomplish a faster recovery in vaginal hysterectomy cases¹¹. Only 2% of NDVH cases required blood transfusion postoperatively whereas, 46% cases of TAH required blood transfusion postoperatively.

CONCLUSION

Vaginal hysterectomy is easy, safe procedure with early ambulation. This avoids an incision scar over the abdomen.

Table-1-Complications of NDVH vs TAH

Complications	NDVH(No of cases)	TAH(No of cases)
Duration of surgery	65 min	80 min
Blood transfusion	3	11
Ambulation	1 day	3 days
Duration of hospital stay	3 days	8 days
Fever	None	8
Wound infection	0	4
UTI	3	7
Respiratory infection	0	5
Paralytic ileus	0	4

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