



A STUDY ON NON-DESCENT VAGINAL HYSTERECTOMY (NDVH): A CROSS-SECTIONAL DESCRIPTIVE STUDY

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ABSTRACT

Background Vaginal hysterectomy was traditionally used for utero-vaginal prolapse. The present study was conducted to assess indications and complications of Non-Descent Vaginal Hysterectomy. **Material & methods** This is a cross sectional descriptive study carried out over a period of 2 years. 100 women scheduled for hysterectomy for benign conditions of uterus were included. A preformed questionnaire was made for data collection. Detailed history and thorough clinical examination were done in each case. Data analysis was carried out by mean median percentage and relative risk of NDVH with 95 % confidence intervals ($p < 0.05$). **Results** Out of 100 patients who had hysterectomy, 34% had Dysfunction uterine bleeding, 24% had Fibroid followed by Cervical intraepithelial neoplasia II and III (13%). In intraoperative complication bladder injuries were maximum (4%) and in postoperative complication vault granuloma (12%). **Conclusion** The study concluded that maximum patients had Dysfunction uterine bleeding followed by Fibroid. In intraoperative complication bladder injuries were maximum and in postoperative complication vault granuloma.

KEYWORDS : Dysfunction uterine bleeding, vault granuloma, Non-Descent Vaginal Hysterectomy.

INTRODUCTION

Hysterectomy is the most common major gynecological surgical procedure. It can be done by abdominal or vaginal route and with the help of laparoscopy.¹ The most common indications for hysterectomy are symptomatic uterine leiomyoma, abnormal uterine bleeding, endometriosis, adenomyosis and uterine prolapse. There are three main approaches to perform hysterectomy, namely, abdominal, vaginal and minimally access surgeries including laparoscopic or robotic surgeries. Vagina is the natural route to access the uterus and with good anesthesia facility, adequate light and exposure, better suture materials and operative technique the vaginal approach to explore the uterus has gained popularity. Vaginal route offers cosmetic benefit as it leaves no disfiguring visible scar.² Today gynecologists are becoming vaginal surgeons. They have started to believe that every uterus can be and should be removed vaginally unless the route is contraindicated.³ Vaginal hysterectomy in larger sized uterus is facilitated by bisection, myomectomy, debulking, coring and clampless approach.⁴ Vaginal hysterectomy has been found to be associated with less febrile morbidity, less bleeding necessitating transfusion, shorter hospitalization and faster convalescence than abdominal hysterectomy.⁵ The present study was conducted to assess indications and complications of Non Descent Vaginal Hysterectomy.

MATERIAL & METHODS

This is a cross sectional descriptive study carried out over a period of 2 years. 100 women scheduled for hysterectomy for benign conditions of uterus were included. Before the commencement of the study ethical approval was taken from the Ethical Committee of the institution and informed consent was taken from the participants after explaining them the study. Fibroid uterus, DUB, adenomyosis, endometrial hyperplasia, CIN-II and III, chronic cervicitis, PID, postmenopausal bleeding and invasive mole with previous history of one caesarean section, without any descent of uterus were included in the study. Malignant condition of uterus and cervix, benign condition of the pelvic organ with

previous history of two or more caesarean section and suspected dense adhesion and utero vaginal prolapsed were excluded from the study. A preformed questionnaire was made for data collection. Detailed history and thorough clinical examination were done in each case. Particular attention was given to operative time, per and post-operative complications, amount of blood loss and hospital stay. All cases were re-assessed in operation theatre after patient was anaesthetized to see the size, mobility of the uterus, vaginal accessibility and laxity of the pelvic muscles. All the principles of vaginal hysterectomy in non-descent uterus were followed and appropriate instruments were also used.^{6,7} All cases were done under spinal anesthesia. Extended lithotomy position with legs apart provided good spaces for assistants to stand and assist without discomfort. Labial stitches made the surgical field wide for better visualization. Urinary bladder was emptied to find out the vesicouterine space clearly. The mobility of the uterus and surrounding structures was checked by holding the cervix with vulsellum forceps moving the uterus in all directions. Checked for hemostasis, then cleaned and packed with gauze. The pack and catheter were removed after 24 hours. Data analysis was carried out by mean median percentage and relative risk of NDVH with 95 % confidence intervals ($p < 0.05$).

RESULTS

Out of 100 patients who had hysterectomy, 34% had Dysfunction uterine bleeding, 24% had Fibroid followed by Cervical intraepithelial neoplasia II and III (13%).

Table 1: Indications for performing NDVH

Indication	N (%)
Dysfunction uterine bleeding	34 (34%)
Fibroid	24 (24%)
Adenomyosis	12 (12%)
Cervical intraepithelial neoplasia II and III	13 (13%)
Endometrial hyperplasia	6 (6%)
Chronic cervicitis	3 (3%)
Postmenopausal bleeding	4 (4%)

Pelvic inflammatory diseases	3 (3%)
Invasive mole	1 (1%)

Table 2: Surgical complications

Surgical complications	N (%)
Intraoperative	
Bladder injury	4 (4%)
Rectum injury	1 (1%)
Post operative	
Secondary haemorrhage	10 (10%)
Vault granuloma	12 (12%)
Total	27 (27%)

In intraoperative complication bladder injuries were maximum (4%) and in postoperative complication vault granuloma (12%).

DISCUSSION

Earlier, vaginal hysterectomies were indicated for prolapse uterus or uterine inversion, but nowadays it can be easily performed for enlarged uterus due to fibroid or adenomyosis. The techniques like bisection myomectomy, wedge resection, slicing method, coring and use of Ligature vessel sealing system, used either individually or in combination has made the per vaginal removal of uterus feasible and safe.⁸

Out of 100 patients who had hysterectomy, 34% had Dysfunction uterine bleeding, 24% had Fibroid followed by Cervical intraepithelial neoplasia II and III (13%). In intraoperative complication bladder injuries were maximum (4%) and in postoperative complication vault granuloma (12%).

Somani P et al conducted a study to study the intraoperative and post-operative complications encountered during NDVH and their management. A total of 50 patients were included in the study. In 92% of cases operated, no intraoperative complications were found suggesting low morbidity associated with the procedure. Hemorrhage requiring blood transfusion was found in 4% of cases.⁹

Khandelwal K et al compared the clinical outcome in cases of trans-abdominal hysterectomy (TAH), non-descent vaginal hysterectomy (NDVH) and total laparoscopic hysterectomy (TLH). During the study period we selected total 90 patients as per our inclusion criteria. Among 90 patients, 30 patients underwent total abdominal hysterectomy, 30 total laparoscopic hysterectomy and 30 non-descent vaginal hysterectomy. Commonest indication for hysterectomy in our study was dysfunctional uterine bleeding (52.2%).

Mean operating time in the TAH, TLH and NDVH group was 126.5±49.8 minutes, 142.3±33.7 minutes and 97.3±23.73 minutes respectively. Mean blood loss in the TAH, TLH and NDVH groups was 319±82.6 ml, 142.2±72.9 ml and 201.7±49.3 ml respectively. Intra-operative complications including haemorrhage, bladder and ureteric injury were maximum in the TAH group (6 patients) and minimum in the NDVH group (2 patients only). Post-operative complications including anaemia, febrile morbidity, wound infection and need for blood transfusion was maximum in the TAH group and minimum in the NDVH group.¹⁰

CONCLUSION

The study concluded that maximum patients had Dysfunction Uterine Bleeding followed by Fibroid. In intraoperative complication bladder injuries were maximum and in postoperative complication vault granuloma. Post-operative complications following NDVH are minimal and subside without sequelae. NDVH should, therefore, be considered as the primary route for all hysterectomies unless contra indicated in the absence of prolapsed.

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