

Original Research Article

TO DETERMINE THE OPERATIVE FEASIBILITY OF NDVH FOR VARIOUS INDICATIONS OF HYSTERECTOMY IN WOMEN WITH NON-DESCENT UTERUS.

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Abstract

Background & Methods: The aim of the study is to determine the operative feasibility of NDVH for various indications of hysterectomy in women with non-descent uterus.

Results: Mean duration of operative time in study group was 25-50 min and in control group 40-95 min. 31 cases needed BT in study group while as high as 72 cases needed BT in control group. Intraoperative blood loss was also significantly less in study group (100-350ml) than control group (150-500ml).

Conclusion: In short, Non-descent vaginal hysterectomy should be the technique of choice in routine practice for management of patients with non-descent benign diseases of the uterus. Trans-abdominal approach should be only left for those cases where vaginal hysterectomy is either contraindicated or intraoperative conversion to abdominal route becomes mandatory due to complications. 72 cases of control group needed blood transfusion as compare to only 31 cases in study group. These facts were also affected by degree of anaemia on admission and blood loss during surgery.

Keywords: feasibility, NDVH, hysterectomy, women & uterus.

Study Design: Case Control Study.

1. Introduction

Hysterectomy is the most common operation performed by gynaecologist, next to caesarean section [1]. NDVH is removal of uterus through vagina in absence of uterine descent. Vaginal route is preferred for removing uterus as it gives natural route, scar less, safer results than abdominal route. Because of increased caesarean sections, women undergoing hysterectomies with caesarean sections are increasing [2]. Earlier previous caesarean section was a relative contraindication to vaginal hysterectomy due to uterovesical adhesions and risk for unintended cystostomy. Abdominal hysterectomy is always comparatively a major surgery than vaginal hysterectomy and the significant complications like paralytic ileus, incisional hernia, infection etc. are significantly less with vaginal route.

A circumferential incision is made around the cervix, the bladder is dissected away from the cervix and the peritoneal cavity is reached from the anterior and posterior vaginal fornix. The cardinal and uterosacral ligaments are ligated to allow the uterus to descend before cutting the uterine vessels[3]. The upper pedicles are ligated after the uterus has been delivered vaginally. If the ovaries are to be removed, clamps are first placed across the mesosalpinx and then across the infundibulopelvic ligament.

A technique without ligation of the paracervical ligaments is used in Japan. The lower ligaments are cut only with scissors, and the uterine arteries, the upper ligaments and tubes are ligated and divided. At this stage the uterine arteries and cardinal ligaments are sutured together. Another modification of vaginal hysterectomy is Doderlein vaginal hysterectomy[4]. After first delivering the fundus of the uterus through the anterior or posterior vaginal wall, the pedicles can then be secured vaginally in the same order as they would be in regular abdominal hysterectomy (Garry 1994a). Subtotal hysterectomy may be also performed in this manner[5].

2. Material and Methods

This study was conducted at MTH hospital, MGM Medical College, Indore for 01 Year. Cases were enrolled from amongst women admitted in the gynecology ward for hysterectomy. Total 170 cases were included in the study. Cases planned for NDVH were included in the study group (85 cases) and rest 85 cases included were those planned for TAH (control group). Both groups had similar indications for hysterectomy. Patient's age, parity, weight, menstrual history and presenting complaints were noted. A complete general, physical and pelvic examination were performed. All the investigations required for major operation were done. A pre-operative ultrasonography was done to access the size of the fibroid and any adnexal pathology.

Inclusion Criteria

1. Only patients requiring hysterectomy for benign gynecological disorders without prolapse were taken.
2. Written informed consent
3. No serious / complicated medical disease

Exclusion criteria

1. Cases with prolapse of any degree were excluded.
2. Patients with severity restricted uterine mobility.

3. Result

TABLE No. 1: DISTRIBUTION OF CASES ACCORDING TO AGE

Age (years)	NDVH group	TAH group
30-35	02 (2.3%)	05 (5.88%)
36-40	13 (15.2%)	31 (36.4%)
41-45	25 (29.4%)	23(27.05%)
46-50	20 (23.5%)	18 (21.17%)
51-55	16 (18.8%)	05 (5.88%)
>55	09 (10.8%)	03 (3.53%)

Majority of the cases who had undergone NDVH belonged to the age group of 41-45 years. At ages > 55 years due to older age prolapse was invariably present, and thus patients of more than 55 years of age were generally excluded from the study.

TABLE No. 2: DISTRIBUTION ACCORDING TO PARITY

Parity	NDVH group	TAH group
0	00 (0.0%)	01 (1.17%)
1	01 (1.17%)	01 (1.17%)
2	31 (36.47%)	24 (28.23%)
3	32 (37.6%)	34 (40.0%)
4 and above	21 (24.70%)	25 (29.41%)

Maximum patients were parous and most were para2 and para 3 women in both groups. Only 1 patient was operated at zero parity, the indication being endometriosis. At higher parity, prolapse is usually present, hence many patients having 4 or more children were excluded. The control group selected had similar pattern of parity.

TABLE No. 3: INTRAOPERATIVE COMPARISON OF TWO GROUPS

Events	NDVH group	TAH group	Chi ²	P value
Mean duration of operation(min)	25-50min	40-95min	-	-
Need for BT	31	72	82.50	0.048
Difficulty in opening anterior pouch	04	11	6.5	0.37
Difficulty in opening posterior pouch	01	09	11.58	0.24
Difficulty in delivering uterus	07	08	0.32	0.69
Blood loss(ml)	100-350ml	150-500ml	-	-
Additional procedure performed	26	73	108	<0.0001

Mean duration of operative time in study group was 25-50 min and in control group 40-95 min. 31 cases needed BT in study group while as high as 72 cases needed BT in control group. Intraoperative blood loss was also significantly less in study group (100-350ml) than control group (150-500ml).

4. Discussion

Majority of the women were in the age group of 40 – 50 years and multipara as noted by Saha R. et al [6]. The commonest indication was fibroid uterus (40%). Fibroid uterus was also the commonest indication. On the contrary DUB (52%) was the commonest indication followed by fibroid (22%) as reported by Suhas Shinde et.al [7]. and Shital T Metha et.al [8]. The mean blood loss was 150 ± 20 ml and amount of loss depend on uterine size and duration of surgery. Similar results were reported by Bharatnur et.al [9]. Mean duration of surgery was 60 ± 15 min as compared to Dewan et al. (54.5 min), Bharatnur et al. (65 min), Bhadra et.al [14] (55 min),and N.Kumar et.al (50 ± 20 min). The operative time was definitely more in cases with dense bladder adhesions and also dependent on the size of uterus and experience of the surgeon. In our study there was no bladder injury. A very low incidence of bladder injury 7/5655 (0.1%) was also reported by Sheth SS et.al [10]. Post-operative complications were minimal. Mean hospital stay was 4-5 days.

Study by S Kumar, hysterectomy was more 23.3% in the age group of 40-45 years and trans-abdominal hysterectomy was more in age of 51-55 years of 35.7% [11].

Rasmussen KL, the age of the patients ranged from 26-75 years. Majority of them were between 40-50 years of age [12].

In a study by Neerja G et al Out of 75 cases of NDVH 13 patient were nulliparous and all other had one or more vaginal births. The study by Rupali D et al. showed that most of the patient who had undergone NDVH was para3 (similar to our study) 46%.

Both para 2 patient and patient having 4 or more children constituted 24% each. 4% undergoing NDVH were primipara. A number of studies have also shown significant number of nulliparity patients undergoing NDVH, thus proving that nulliparity is not a contraindication for NDVH.

5. Conclusion

In short, Non-descent vaginal hysterectomy should be the technique of choice in routine practice for management of patients with non-descent benign diseases of the uterus. Trans-abdominal approach should be only left for those cases where vaginal hysterectomy is either contraindicated or intraoperative conversion to abdominal route becomes mandatory due to complications. 72 cases of control group needed blood transfusion as compared to only 31 cases in study group. These facts were also affected by degree of anaemia on admission and blood loss during surgery.

6. References

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