

ORIGINAL RESEARCH

Evaluation of the peri- operative and post-operative complications of vaginal and abdominal hysterectomy

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ABSTRACT

Background: A woman's uterus can be surgically removed during a hysterectomy. The present study was conducted to evaluate the peri- operative and post- operative complications of vaginal and abdominal hysterectomy. **Materials & Methods:** 76 cases undergoing hysterectomy were divided into 2 groups of 38 each. Group I patients underwent abdominal hysterectomy and group II underwent vaginal hysterectomy. Parameters such as operative time, primary haemorrhage, wound infection, hospital stay etc. were recorded. **Results:** Indication was uterovaginal prolapse in 11 and 13, leiomyoma in 15 and 14, dysfunctional uterine bleeding in 12 and 11 in group I and II respectively. Duration of operation was 85.2 minutes and 73.4 minutes, mean blood loss was 372.2 ml and 290.5 ml, hospital stay was 3.4 days and 2.7 days and preoperative haemoglobin was 11.5g/dl and 12.3g/dl in group I and II respectively. The difference was significant ($P < 0.05$). Complications were secondary haemorrhage in 4 and 2, wound infection in 5 and 1, pyrexia in 1 and 0, re- admission in 5 and 2 and re- opening in 2 and 1 patients in group I and group II respectively. **Conclusion:** Due to its clear benefits, VH can be administered to all patients with a moderate-sized uterus who need a hysterectomy for benign diseases.

Keywords: hysterectomy, pyrexia, uterus

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INTRODUCTION

A woman's uterus can be surgically removed during a hysterectomy. For a variety of medical conditions, such as cancer, endometriosis, uterine prolapse, persistent pelvic pain, irregular bleeding, and uterine fibroids, it may be done.¹ An abdominal hysterectomy is a surgical procedure in which the uterus is removed through an incision made in the lower abdomen. An abdominal hysterectomy may be recommended for various medical conditions. Large or numerous fibroids that cause symptoms such as heavy bleeding, pain, or pressure.² Severe endometriosis that affects other organs and cannot be managed with less invasive treatments. When the uterus has descended into the vaginal canal, causing symptoms like pelvic pressure and urinary problems. Cancer of the uterus, cervix, ovaries, or fallopian tubes. Persistent pelvic pain that has not responded to other treatments.³ Heavy or prolonged menstrual bleeding that does not respond to other treatments. Originally, vaginal hysterectomy (VH) was solely indicated for prolapse; however, these days, its indications are growing.⁴ Due to its several advantages over AH, VH

is acknowledged as being less intrusive than AH and has been used preferentially in some cases. Compared to the other two techniques, LH takes longer and requires more surgical abilities. The risk of ureteric or bladder damage is higher.⁵ Hysterectomy indications include endometriomas, endometriosis, endometrial hyperplasia, uterovaginal (UV) prolapse (pelvic relaxation), pelvic inflammatory disease (PID), dysmenorrhagia, dysmenorrhoea, or pelvic pain associated with significant pelvic disease, intractable postpartum hemorrhage, ruptured tubo-ovarian abscesses, and malignancies such as cervical intraepithelial neoplasia or invasive disease.⁶ The present study was conducted to evaluate the peri-operative and post-operative complications of vaginal and abdominal hysterectomy.

MATERIALS & METHODS

The present study was conducted on 76 cases undergoing hysterectomy. All were informed regarding the study and their written consent was obtained.

Data such as name, age, etc. was recorded. Patients were divided into 2 groups of 38 each. Group I patients underwent abdominal hysterectomy and group II underwent vaginal hysterectomy. Parameters such as operative time, primary haemorrhage, wound

infection, postoperative analgesia, febrile morbidity, hospital stay and secondary haemorrhage etc. were recorded. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Assessment of parameters

Parameters	Variables	Group I	Group II	P value
Indication	Uterovaginal prolapse	11	13	0.91
	Leiomyoma	15	14	
	Dysfunctional uterine bleeding	12	11	
Duration of operation (minutes)		85.2	73.4	0.04
Blood loss (ml)		372.2	290.5	0.05
Hospital stay (days)		3.4	2.7	0.02
Preoperative haemoglobin (g/dl)		11.5	12.3	0.94

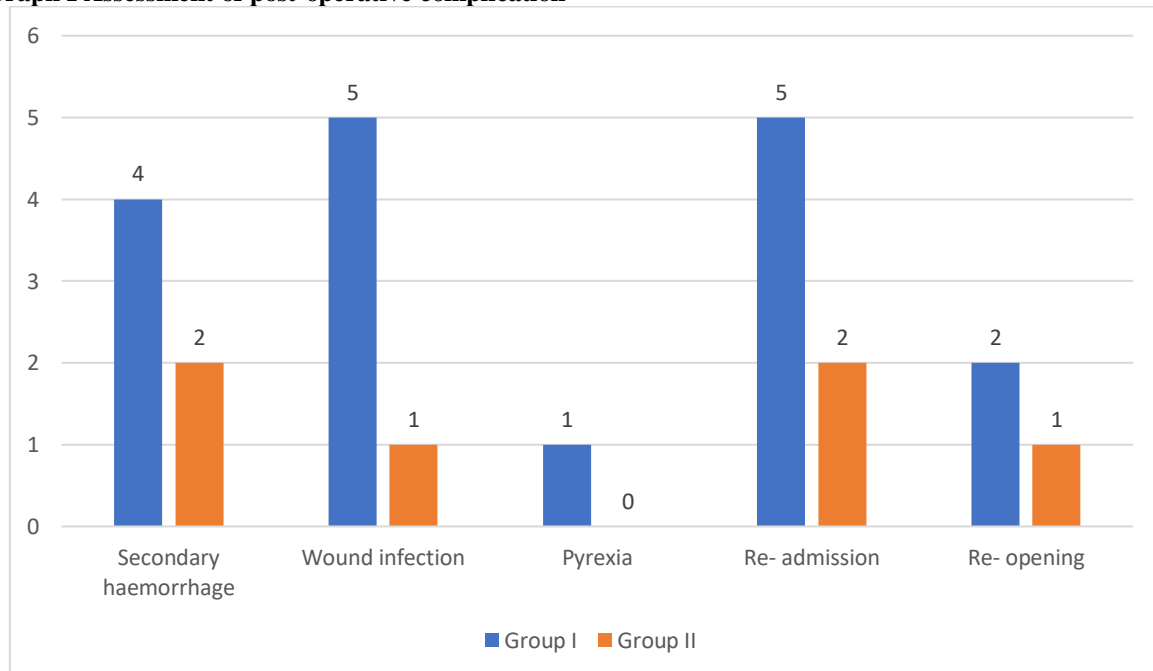
Table I shows that indication was uterovaginal prolapse in 11 and 13, leiomyoma in 15 and 14, dysfunctional uterine bleeding in 12 and 11 in group I and II respectively. Duration of operation was 85.2minutes and 73.4minutes, mean blood loss was 372.2 ml and 290.5 ml, hospital stay was 3.4days and 2.7days and preoperative haemoglobin was 11.5g/dl and 12.3g/dlin group I and II respectively. The difference was significant (P< 0.05).

Table II Assessment of post-operative complication

Complications	Group I	Group II	P value
Secondary haemorrhage	4	2	0.05
Wound infection	5	1	
Pyrexia	1	0	
Re- admission	5	2	
Re- opening	2	1	

Table II, graph I shows that complications were secondary haemorrhage in 4 and 2, wound infection in 5 and 1, pyrexia in 1 and 0, re- admission in 5 and 2 and re- opening in 2 and 1 patients in group I and group II respectively.

Graph I Assessment of post-operative complication



DISCUSSION

The posterior and anterior routes of surgery have now been described for vaginal myomectomy, even for

fibroids weighing up to 1,600 g.⁷ For DUB, hysterectomy is the last treatment option for women who have finished having children, do not tolerate

medication, or have atypical endometrial hyperplasia. The selection of cases for VH or AH depends upon a number of clinical variables, either alone or in combination.⁸ These variables include pelvic anatomy, uterine size, adnexal disease, gastrointestinal complaints, urological disorders (cystocele/prolapse of the urethrovesical angle, rectocele, enterocele), heart or lung disease, body mass index, parity, previous tubal ligation, or caesarean section.⁹ Hysterectomy is a relatively safe, common, and routine surgical procedure which rarely leads to peri-operative death. Overall, mortality rates for AH or VH are 0.1–0.2%.¹⁰ The present study was conducted to evaluate the peri-operative and post-operative complications of vaginal and abdominal hysterectomy.

We found that indication was uterovaginal prolapse in 11 and 13, leiomyoma in 15 and 14, dysfunctional uterine bleeding in 12 and 11 in group I and II respectively. Duration of operation was 85.2 minutes and 73.4 minutes, mean blood loss was 372.2 ml and 290.5 ml, hospital stay was 3.4 days and 2.7 days and preoperative haemoglobin was 11.5 g/dl and 12.3 g/dl in group I and II respectively. McCracken G et al¹¹ found that LAVH took significantly longer than both TAH and VH but there was no significant differences in operating times between TAH and VH (Table 2). The average weight of specimen increased from 100g (range 29–415g) in the VH group to 127g (range 38–515g) in the LAVH group through to 265g (range 70–1066g) for the TAH group. Intra-operatively, adhesions were diagnosed in 30 of 135 cases (22.2%), 13/47 in the LAVH group, 15/45 in the TAH group and 2/43 in the VH group. Fibroids were diagnosed in 22 cases (16.3%) of which 14 were in the TAH group (VH 3, LAVH 5 cases). In the LAVH group 36/47 cases (81%) included salpingo-oophorectomy or bilateral salpingo-oophorectomy, in the TAH group 37/45 cases (82%) included bilateral salpingo-oophorectomy whereas only 12/43 cases undergoing VH (28%) included uni- or bilateral salpingo-oophorectomy. Histopathologically, fibroids were diagnosed in 54 cases (40%) with the greatest proportion in the TAH group (51%, 23 cases) compared with 19% for the LAVH group (9 cases) and 37% of patients undergoing VH (16 cases). Fibroids in women undergoing VH were typically small and this is reflected in the average specimen weight noted above. Three patients in each of the three groups required blood transfusion. A single patient from each group sustained either a bowel or urinary tract injury (bladder injury in both LAVH and TAH, bowel injury in VH): all were noted at the time of operation, repaired and had no resultant problems at post-operative follow-up.

We observed that complications were secondary haemorrhage in 4 and 2, wound infection in 5 and 1, pyrexia in 1 and 0, re-admission in 5 and 2 and re-opening in 2 and 1 patients in group I and group II respectively. Charoenkwan K et al¹² assessed the

effects of early versus delayed (traditional) initiation of oral intake of food and fluids after major abdominal gynaecologic surgery. Rates of developing postoperative ileus were comparable between study groups. When we considered the rates of nausea or vomiting or both, there was no evidence of a difference between the study groups. There was no evidence of a difference between the study groups in abdominal distension or a need for postoperative nasogastric tube placement. Early feeding was associated with shorter time to the presence of bowel sound and faster onset of flatus. In addition, women in the early feeding group resumed a solid diet sooner. There was no evidence of a difference in time to the first passage of stool between the two study groups. Hospital stay was shorter in the early feeding group. Infectious complications were less common in the early feeding group (RR 0.20, 95% CI 0.05 to 0.73, $P = 0.02$, 2 RCTs, 183 women, $I^2 = 0\%$, high-quality evidence). In one study, the satisfaction score was significantly higher in the early feeding group (MD 11.10, 95% CI 6.68 to 15.52, $P < 0.00001$, 143 women, moderate-quality evidence).

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that due to its clear benefits, VH can be administered to all patients with a moderate-sized uterus who need a hysterectomy for benign diseases.

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