ORIGINAL RESEARCH

Abdominal hysterectomy versus vaginal hysterectomy for enlarged uterus

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ABSTRACT
Background: Abdominal or vaginal, complete or subtotal laparoscopic assisted vaginal hysterectomy is the most common elective major operation in gynecology. The present study was conducted to compare vaginal hysterectomy and abdominal hysterectomy for enlarged uterus. **Materials & Methods:** 78 women with enlarged uteruswere divided into 2 groups of 39 each. Group I patients underwent total abdominal hysterectomy and group II patients underwent vaginal hysterectomy. In both groups, parameters such parity, uterine weight, uterine size, indication, blood loss, and contraindications were noted. **Results:** Indication blood loss was 200-300 ml in 14 and 18 and 300-500 ml in 25 and 21 patients respectively. Operative time was <1 hour in 30 and 28 and >1 hour in 9 and 11 patients respectively. Indication for hysterectomy was adenomyosis in 4 and 9, fibroids in 13 and 12, endometrial hyperplasia in 12 and 10 and endometrial polyp in 10 and 8 patients in group I and II respectively. The size of uterus was <12 weeks in 26 and 25, >12 weeks in 13 and 14 patients. Parity was Nuli-P1 was 4 and 6, P2-P4 in 26 and 27 and P5-P7 in 9 and 6 patients. The weight of was 100-150 grams in 15 and 13, 150-200 in 14 and 17 and 200-250 in 10 and 9 patients respectively. The difference was significant (P< 0.05). Complications were bowel injury in 3 and 5, ureteric injury was 1 and 2, urinary tract infection in 1 and 3 and re- laparotomyin 2 and 4 patients in group I and II respectively. The difference was non- significant (P> 0.05). **Conclusion:** Up to 14 weeks following appropriate case selection and the application of bulk reducing methods such as bisection, myomectomy, morcellation, and coring, a vaginal hysterectomy may be performed in instances with an enlarged uterus due to a benign ailment. A safe and efficient treatment for moderately enlarged uteri is vaginal hysterectomy.

Keywords: abdominal, endometrial polyp, vaginal hysterectomy

INTRODUCTION

Abdominal or vaginal, complete or subtotal laparoscopic assisted vaginal hysterectomy is the most common elective major operation in gynecology.[1] Instead of being in direct conflict with one another, the two treatments are believed to have a specific role in the gynecologist's operational toolbox.[2] Laparoscopic assisted vaginal hysterectomy (LAVH) should only be used as a last resort because of its long operating duration, high cost, and lack of additional benefits in terms of fewer postoperative complications. When compared to the other three options, vaginal hysterectomy should be the preferred procedure.[3]

Because of procedures like morcellation, bisection, and coring, the abdominal route is still advised for moderately enlarged uteruses even if the vaginal method has become more practical for bigger uteruses.[4] The vaginal approach can reduce surgical morbidity and provide a speedier recovery. Large uterines are thought to be contraindicated for vaginal hysterectomy by many gynecologists; nonetheless, this can be accomplished with techniques including bisection, myomectomy, intramyometrial coring, and morcellation.[5] Other common constraints considered for vaginal hysterectomy procedures are nulliparity and previous cesarean sections. However, problems can be solved by surgical expertise and careful operating techniques. This calls for a return to vaginal hysterectomy, which is a less invasive, safe, and cost-effective operation with less adverse effects that should be chosen.[6]The present study was conducted to compare vaginal hysterectomy and abdominal hysterectomy for enlarged uterus.

MATERIALS & METHODS

The present study was conducted on 78 women with enlarged uterus. 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 39 each. Group I patients underwent total abdominal hysterectomy and group II patients underwent vaginal hysterectomy. In both groups, parameters such parity, uterine weight, uterine size, indication, blood loss, and contraindications were noted. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Parameters	Variables	Group I	Group II	P value
Intra-operative blood loss	200-300ml	14	18	0.81
	300-500ml	25	21	
Operative time	<1 hour	30	28	0.05
	>1 hour	9	11	
Indication	Adenomyosis	4	9	0.74
	Fibroid	13	12	
	Endometrial hyperplasia	12	10	
	Endometrial polyps	10	8	
Size of uterus	<12 weeks	26	25	0.05
	>12 weeks	13	14	
Parity	Nuli-P1	4	6	0.04
	P2-P4	26	27	
	P5-P7	9	6	
Weight of uterus	100-150grams	15	13	0.21
	150-200grams	14	17	
	200-250grams	10	9	

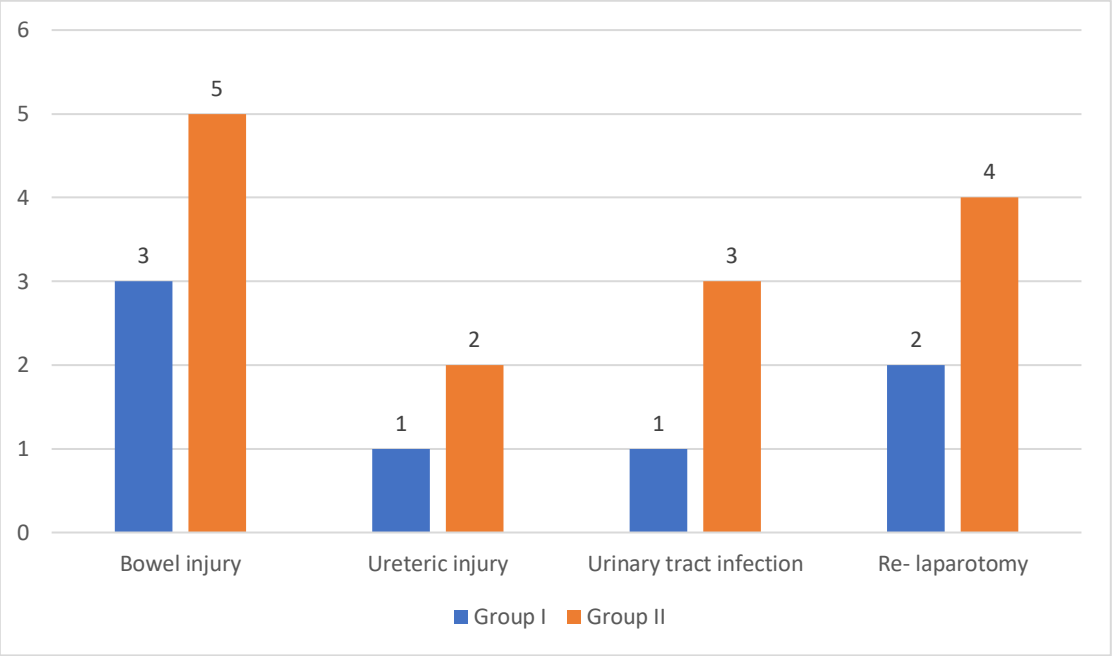
Table I shows that intra-operative blood loss was 200-300 ml in 14 and 18 and 300-500 ml in 25 and 21 patientsrespectively. Operative time was <1 hourin 30 and 28 and >1 hour in 9and11 patients respectively. Indicationfor hysterectomy was adenomyosis in 4 and 9, fibroids in 13 and 12, endometrial hyperplasia in 12 and 10 and endometrial polyp in 10 and 8 patients in group I and II respectively. The size of uterus was <12 weeks in 26and 25, >12 weeks in 13 and 14 patients. Parity was Nuli-P1 was 4 and 6, P2-P4 in 26 and 27 and P5-P7 in 9 and 6 patients. The weight of was 100-150 grams in 15 and 13, 150-200 in 14 and 17 and 200-250 in 10 and 9 patientsrespectively. The difference was significant (P< 0.05).

Table II Complications

Complications	Group I	Group II	P value
Bowel injury	3	5	0.52
Ureteric injury	1	2	
Urinary tract infection	1	3	
Re- laparotomy	2	4	

Table II, graph I shows that complications were bowel injury in 3 and 5, ureteric injury was 1 and 2, urinary tract infectionin 1 and 3 and re- laparotomy in 2 and 4 patients in group I and II respectively. The difference was non- significant (P> 0.05).

Graph I Complications



DISCUSSION

With 66% of instances, abdominal hysterectomy is the most common procedure performed globally.[7] The popularity of less invasive operations has increased with the development of laparoscopic hysterectomy. Compared to abdominal and laparoscopic hysterectomy, vaginal hysterectomy is linked to lower morbidity, early ambulation, shorter hospital stays, and lower costs.[8] The most common procedure performed globally is abdominal hysterectomy, which is linked to more difficulties, greater expenses, and longer hospital stays, despite the benefits of vaginal hysterectomy.[9,10]The present study was conducted to compare vaginal hysterectomy and abdominal hysterectomy for enlarged uterus.

We found that intra-operative blood loss was 200-300 ml in 14 and 18 and 300-500 ml in 25 and 21 patients respectively. Operative time was <1 hour in 30 and 28 and >1 hour in 9 and 11 patients respectively. Indication for hysterectomy was adenomyosis in 4 and 9, fibroids in 13 and 12, endometrial hyperplasia in 12 and 10 and endometrial polyp in 10 and 8 patients in group I and II respectively. The size of uterus was <12 weeks in 26 and 25, >12 weeks in 13 and 14 patients. Parity was Nuli-P1 was 4 and 6, P2-P4 in 26 and 27 and P5-P7 in 9 and 6 patients. The weight of was 100-150 grams in 15 and 13, 150-200 in 14 and 17 and 200-250 in 10 and 9 patients respectively. In order to remove moderately enlarged uteri, Hoffman et al[11] evaluated the intraoperative and postoperative consequences of abdominal hysterectomy with transvaginal morcellation. A total of 112 individuals were in the abdominal group and 50 patients were in the vaginal group. For age, parity, obesity, hypertension, insulin-dependent diabetes mellitus, and previous genitourinary surgery, there was no statistically significant difference between the two groups. The average operating time for the abdominal and vaginal hysterectomy groups was 148 and 122 minutes, respectively. 527 and 586 milliliters of blood were lost on average (not significant). Bilateral oophorectomy was performed on 70% of the abdominal group and 22% of the vaginal group. 335 and 336 grams, respectively, were the mean uterine weights (not significant). 2.1 and 3.6 were the average days of beginning a regular diet, respectively. 3.6 and 5.1 were the average days of discharge. The two groups experienced comparable complications.

We found that complications were bowel injury in 3 and 5, ureteric injury was 1 and 2, urinary tract infection in 1 and 3 and re- laparotomy in 2 and 4 patients in group I and II respectively. Taylor et al[12] contrasted the intraoperative and postoperative consequences of vaginal hysterectomy with morcellation with abdominal hysterectomy for an enlarged, myomatous uterus. They looked at the medical records of 244 patients who had total abdominal hysterectomy for an enlarged, myomatous uterus and 139 patients who had vaginal hysterectomy with morcellation. Risk variables for surgery and anesthesia did not significantly differ between the two groups. The groups' operating times were comparable (P>0.05). A total abdominal hysterectomy resulted in a considerably longer hospital stay (mean, 3.9 days vs. 2.6 days). The abdominal approach resulted with more perioperative problems (10% vs. 25%).

Hysterectomy was performed by Cosson et al[13] for benign conditions. For the 1248 vaginal hysterectomies (8%), 190 laparoscopically assisted vaginal hysterectomies (12%), and 166 abdominal hysterectomies (10%), pre-operative and early postoperative problems were documented. Not a single patient passed away. There was no discernible variation in the number of bladder (0.9%) and ureter

(0.06%) injuries. Laparotomy was associated with a higher overall rate of intestinal injury (0.6%) (2.4%). 45 patients (2.8%) had more than 500 ml of hemorrhage. Laparotomy (6.7%), laparoscopy (5.3%), and vaginal hysterectomy (2%, P<0.001) were the rates. The procedure type has no bearing on the total reoperation rate of 0.8%.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that up to 14 weeks following appropriate case selection and the application of bulk reducing methods such as bisection, myomectomy, morcellation, and coring, a vaginal hysterectomy may be performed in instances with an enlarged uterus due to a benign ailment. A safe and efficient treatment for moderately enlarged uteri is vaginal hysterectomy.

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