

Vaginal Hysterectomy for the Large Uterus

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Summary

Vaginal hysterectomy for the large uterus is seldom performed in Malaysia. The traditional operation is abdominal hysterectomy. This is a personal series of vaginal hysterectomies for enlarged uterus of more than 12 weeks size (>280g) carried out in a private hospital between 1/1/97 to 30/9/2000. A total of 40 cases were done with the weights of the uterus ranging from 290g to 790g. The mean weight of the uterus was 434g. The average operating time was 92.1 min. The complications were minimal with 2 cases of blood transfusion for intra-operative hemorrhage, 1 case of fever and 1 case of bladder perforation. This series demonstrates feasibility and safety of the operation. The excellent recovery due to the absence of an abdominal scar should be a strong incentive for specialists to learn the skill.

Key Words: Vaginal hysterectomy, Large uterus

Introduction

Vaginal hysterectomy is an alternative to abdominal hysterectomy and should not be confined only to cases of prolapsed uterus¹. The lack of an abdominal scar allows better post operative recovery compared to abdominal hysterectomy. However in Malaysia² and many parts of the world¹ vaginal hysterectomy is carried out for prolapsed uterus.

The size of the uterus has often been cited as a reason for choosing the abdominal route for hysterectomy. However the technical difficulty due to size can be overcome with experience and the use of various techniques of uterine morcellation, bisection and myomectomy^{1,3}. This observational study demonstrates not only the feasibility of vaginal hysterectomy for the large uterus but also the safety and good post operative outcome of the procedure.

Materials and Methods

This is a retrospective observational study of all the cases of vaginal hysterectomy for uterus larger than 12 weeks size (280g) carried out by the author between January 1997 to 31 August 2000. The cases were carried out at the Johor Specialist Hospital which is a 200 bedded private hospital in Johor Bahru.

Results

There were 40 cases of vaginal hysterectomy for uterus larger than 12 weeks size. There were 34 cases of uterine fibroids, 6 cases of adenomyosis and 1 case of uterovaginal prolapse. Other procedures that were carried out during the surgery in addition to vaginal hysterectomy were pelvic floor repair for one patient with prolapse uterus and posterior repair for 4 patients. There were 25 patients who had prophylactic vaginal

bilateral salpingoophorectomy. One patient had only a right salpingoophorectomy as she had a past history of a previous left salpingoophorectomy for ovarian cyst.

There were 7 patients with previous Caesarean sections. One of the patients was a virgo intacta and another a nulliparous women.

The weights of the uterus are as shown in Table I. The mean weight was 434.2 g + SD 130.3. The heaviest uterus removed vaginally was a 790g uterus.

The operating time is as shown in Table II. The mean operating time was 92.1min +SD 29.2. There were 9 patients (22.5%) whose operation was completed within 60 minutes.

The safety of the operation was 90%. Only 4 patients had complications. There were 2 patients who needed 2 units of blood transfusion for intra-operative bleeding and one patient who had post-operative fever. There was one patient who had a bladder perforation. This was repaired vaginally and the patient was discharged on the second post-operative day with an indwelling catheter. The catheter was removed in the outpatient clinic on the seventh post-operative day with no further problem.

The post-operative hospital stay was short. There were 5 (12.5%) patients who were discharged on the first post-operative day. The majority of the

Table II
Operating Time of Vaginal Hysterectomy for Large Uterus

Weight of Uterus	Mean time	SD	OT Range
Group A (281 - 400g)	85.2 min	27.0	45 - 130 min
Group B (401 - 600g)	99.7 min	31.8	50 - 150 min
Group C (601 - 800g)	100 min	28.3	60 - 120 min

No statistical significance in operating time.

SD= standard deviation

Student t test: Group A vs Group B = 0.0825

OT= operating time

patients were discharged (90%) by the second post operative day. Only 4 (10%) patients were discharged later and all of them were on the third post-operative day.

Discussion

This personal series demonstrates the feasibility, safety and good outcome of vaginal hysterectomy for the enlarged uterus. Uterine fibroid is the most common indication for hysterectomy. In order to be able to carry out most of the cases of hysterectomy through the vaginal route instead of abdominal hysterectomy, gynaecologists must learn the various techniques of debulking the large uterus. The feasibility of the procedure has been clearly shown by various proponents of vaginal hysterectomy, yet in Malaysia and many parts of the world, gynaecologist are still reluctant to learn the techniques.

The largest uterus in this series weighed 790g that was equivalent to an 18 weeks size gravid uterus. The largest reported case of vaginal hysterectomy was a 1100g uterus by Magos⁴. Previous records were 810g by Grody¹, 750g by Kovac and 700g by Forges. Such large uteruses should only be attempted by those who are very comfortable

Table I
Weights of Uterus Removed Vaginally

Weights	Uterus Size	Number of Cases
281 - 400g	13 - 14 weeks	21 (52.5%)
401 - 600g	15 - 16 weeks	15 (37.5%)
601 - 800g	17 - 18 weeks	4 (10%)

Mean: 434.2 ± SD 130.2

Range: 290g - 790g

SD= standard deviation

with vaginal hysterectomy for the large uterus. Most of the hysterectomies involves much smaller uteruses and would be much easier to do. The level of safety of an operation is dependent on the level of skill.

The operating time was not excessive compared to abdominal hysterectomy. The shortest operating time of 45 minutes involved an uterus weighing 400g. Twenty-five of the patients had prophylactic bilateral salpingoophorectomy performed vaginally as well. The operating time for the 790g uterus was 120 minutes inclusive of bilateral salpingoophorectomy.

The complication rate for vaginal hysterectomy has been shown to be lower than abdominal hysterectomy. The safety of the patient is not compromised in carefully selected cases. The main complication was the single case of bladder perforation that was repaired vaginally with no further problem.

The patients definitely do benefit if the hysterectomy can be carried out safely through the vagina instead of the abdomen. The lack of an abdominal scar will mean less post operative

pain, shorter hospital stay, faster full recovery and lower cost⁴. Laparoscopic assisted vaginal hysterectomy is helpful in difficult cases of vaginal hysterectomy. However, most cases of vaginal hysterectomy by experts of this technique do not need laparoscopic assistance. This would have the advantage of shorter operating time, less pain (minus the abdominal punctures) and less hospital cost. Optimal treatment is one that gives the best overall result.

Vaginal hysterectomy for the large uterus is a feasible and safe operation. The main limiting factor is the lack of desire to learn the skill necessary to carry out the operation safely. The skill can and should be learnt because vaginal hysterectomy gives the best post-operative recovery.

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