

Outcome of Vaginal Hysterectomy for the Undescended and Enlarged Uterus – A Preliminary Report

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Summary

This is a retrospective observational study of outcome of 11 cases of vaginal hysterectomy for undescended and enlarged uterus carried in University Hospital, Kuala Lumpur. The cases included relative contraindications such as 14 weeks size fibroids, severe obesity, previous Caesarean section and nulliparity. All the eight patients agreeable for prophylactic bilateral salpingoophorectomy had their ovaries removed. Operative time ranged from 1 hr 20 min to 2 hr 15 min. All patients were sent home within 48 hours of the operation. The excellent outcome of our initial experience highlights the known advantages of vaginal hysterectomy for undescended and enlarged uterus.

Key Words: Vaginal hysterectomy, Uterine disease

Introduction

Vaginal hysterectomy is rarely carried out in this country when there is no utero-vaginal prolapse. The absence of prolapse does increase the technical difficulty but should not be a contraindication to vaginal hysterectomy¹. The superior post-operative recovery of patients undergoing vaginal hysterectomy over the abdominal route is well accepted². This should be an important enough incentive for gynaecologist to obtain the skill necessary to carry out vaginal hysterectomy for undescended uterus and enlarged uterus. The aim of this retrospective observational study of our initial experience is to highlight the good outcome of vaginal hysterectomy for undescended and enlarged uterus. Various techniques such as vaginal myomectomy, use of Sheth's utero-cervical broad ligament space and Schuchardt's incision were utilised to overcome the technical difficulties encountered.

Method

Eleven cases of vaginal hysterectomy for non prolapse uterus were carried out by the author between

February 1996 and August 1996. The age of the patients ranged from 38 to 57 years old. There was one nullipara and a patient with a history of lower segment Caesarean section.

The indications for hysterectomy were fibroids (4 cases), adenomyosis (4 cases), dysfunctional uterine bleeding (2 cases) and postmenopausal bleeding with endometrial polyp (1). The uterus size ranged from 8 weeks to 14 weeks.

Technique

Uterine mobility was assessed pre-operatively in the clinic and operating theatre under anaesthesia. Lack of uterine mobility is an absolute contraindication to vaginal hysterectomy. The other absolute contraindications are as recommended by Sheth¹ includes uterine size more than 12 weeks, adnexal mass, history of fistula repair and carcinoma of the cervix. These were followed strictly except for the 14 weeks sized uterus.

Two assistants were needed for the operation. Adequate retractions were provided by a self-retaining vaginal retractor, an Auvard vaginal speculum, a Sims speculum and 2 Landon retractors. A standard head lamp was used to provide good vision. The bladder was dissected from the uterus using the blunt technique. The pouch of Douglas was entered using sharp dissection in 10 of the cases. The pedicles were clamped, dissected and ligated using Maingot's tissue clamps. Vicryl No. 1 with a round bodied needle was used for ligation of the pedicles. Vaginal oophorectomy was carried out after removal of the uterus to allow for better access. Various other techniques such as vaginal myomectomy and Schuchardt's incision were used to help to complete the operation.

A Foley's bladder catheter and a vaginal pack was left routinely for 24 hours in all cases. Prophylactic intravenous Unasyn 1.5 g tds was given for one day.

Results

The operative time ranged from 1 hr 15 min to 2 hours. The average time taken is 1 hr 35 min. The operative time improved with experience and the last case (Madam HYF) had a vaginal hysterectomy and posterior colpoperineorrhaphy in 1 hr 15 min.

Most of the cases were complicated and had additional procedures carried out (Table I). Only patient MBN needed a vaginal myomectomy to reduce the size of the uterus. Patient MKC was a nullipara weighing 44 kg. She needed a Schuchardt's incision to increase the vaginal space. Madam KMN was an extremely obese lady weighing 115 kg. The operation was completed in 1 hr 30 min with 700 ml blood loss. Madam PR had a history of lower segment Caesarean section. The utero-cervical broad ligament space as described by Sheth was used to

Table I
Results of 11 cases of vaginal hysterectomy

Name	Age	Indicat	UT Size	BSO	UWT	Special features
1. ABA	47	Fibroids	10	Yes	150g	-
2. MBN	44	Fibroids	14	No	487g	Myomectomy
3. KMN	41	DUB	12	No	246g	Obese: 115kg
4. MN	45	Adeno	10	Yes	170g	Adhesions-POD
5. LPL	52	Fibroids	10	Yes	155g	-
6. MKC	57	PMB	8	Yes	120g	Nulliparous
7. PR	42	Adeno	12	Yes	250g	P/H LSCS
8. SA	46	Adeno	10	Yes	160g	Post repair
9. WYL	46	DUB	10	Yes	170g	-
10. BB	47	Adeno	10	Yes	180g	Post repair
11. HYF	38	Fibroids	12	No	205g	Post repair

Indicat = Indication, UT = Uterus, UWT = Weight of Uterus

BSO = Bilateral Salpingoophorectomy

DUB = Dysfunctional Uterine Bleeding

Adeno = Adenomyosis, PMB = Post Menopausal Bleeding

Post repair = Posterior repair

dissect the scarred uterus from the bladder. All the 9 patients where prophylactic oophorectomy was plan had it carried out successfully.

The blood loss was estimated to range from 200 ml to 700 ml. Only 1 patient needed blood transfusion (Madam LPL). She had severe menorrhagia on the day before the operation. She was found to be pale at induction by the anaesthetist and a decision was made for transfusion at the start of the operation.

All the patients were ambulating and on normal diet 24 hours after the operation. Only oral mefenemic acid was needed for pain relief on the first post-operative day. All the patients were able to micturate normally on the morning of the first post-operative day. All the patients were sent home within 48 hours of the operation. Only one patient was readmitted 15 hours later for acute retention of urine. She was prescribed propantheline earlier for abdominal colic. The acute retention of urine settled spontaneously on taking off the propantheline and she was discharged the following morning.

Post-operative review at 1 week and 6 weeks were uneventful. All the patients were able to do housework by the end of the week. Ten of the patients gave a history of going to the market by the end of the first week.

Discussion

Vaginal hysterectomy for undescended and enlarged uterus is a safe and accepted mode of management¹. It has been said that up to 80% of the cases of hysterectomy can be carried out by the vaginal route instead of abdominally. This is because the vaginal route is superior to the abdominal route in terms of post-operative recovery². However, most of the cases of hysterectomy is actually carried out via the abdominal route³. In most places, including Malaysia, vaginal hysterectomy is mainly confined to patients with utero-vaginal prolapse.

The outcome of the 11 initial cases of vaginal hysterectomy for a undescended and enlarged uterus carried out by the author is encouraging. Most of the cases were complicated but could be completed in a reasonable operative time with no major morbidity.

All normal uteri will have a certain amount of descent when examined under anaesthesia. Sheth¹ differentiate this normal descent from utero-vaginal prolapse by calling the former uterine descent. However, as most gynaecologists are not so familiar with Sheth's concept, the term descent is used interchangeably with prolapse.

A uterus more than 12 weeks size has been listed as an absolute contraindication to vaginal hysterectomy (Table II). However, this is actually a relative contraindication. Uteri up to 14 weeks may be removed safely after carrying out a vaginal myomectomy as for Madam MBN. Sheth who recommends that a 12 weeks size uterus is an absolute contraindication frequently carries out vaginal hysterectomy for uteri beyond that size. A recent study by Magos⁴ showed a good outcome for vaginal hysterectomy for a uterus more than 14 weeks size. However, this should not be a routine and generally not indicated for most patients.

The weights of the uteri ranged from 120g to 487g with an average weight of 193g. Increase in size does increase the difficulty of the operation due to limited access. However, access is also in relation to the vaginal space. As such, multipara with capacious pelvis are ideal candidates for vaginal hysterectomy. Nulliparity while increasing the difficulty of the operation is not a contraindication to vaginal hysterectomy^{1,4,5}. Madam MKC, a 44 kg nullipara needed a Schuchardt's incision

Table II
Absolute contraindications to vaginal hysterectomy

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1. Uterine size more than 12 weeks gestation
 2. Restricted uterine mobility
 3. Limited vaginal space
 4. Adnexal pathology
 5. Vesicovaginal fistula repair
 6. Cervix flush with vagina
 7. Invasive carcinoma of the cervix
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By Sheth SS¹

(equivalent to a large episiotomy) to increase the vaginal space for the operation.

A past history of a lower segment Caesarean section has also been shown by many gynaecologists as not to be a contraindication^{6,7}. The utero-cervical broad ligament space as described by Sheth³ was used to dissect the bladder away from the uterus.

Removal of the ovaries through the vaginal route has been shown to be feasible and has a high success rate in expert hands^{9,10,11,12,13}. Various instruments such as Sheth's oophorectomy clamp⁹, endoloops¹⁴ and endoscopic¹⁵ instruments through the vagina have been used. The failure rate is as low as 5%. Therefore, the desire for prophylactic removal of the ovaries should not be used as an excuse for choosing the abdominal route. Laparoscopic oophorectomy can still be carried out after closure of the vaginal vault if vaginal oophorectomy was not successful.

There is presently a revival in the use of the vaginal route for hysterectomy. This is mainly due to the introduction of laparoscopic assisted vaginal hysterectomy (LAVH)¹⁶. The first case of LAVH was carried out in 1987 by Reich¹⁷ and since then it is very popular among gynaecologists expert in laparoscopy. The purpose of the operation is to convert cases of abdominal hysterectomy

to the vaginal route. Laparoscopy allows visualization of the pelvic organs and dissection of the upper pedicles of the uterus before proceeding the rest of the operation vaginally. However, the cost of equipment and the longer operating time is a deterrent to many gynaecologists^{18,19}. Improving vaginal hysterectomy skills and including a non prolapsed enlarged uterus for vaginal hysterectomy will help to avoid this 2 main disadvantage of LAVH. This is especially important in a developing country like Malaysia where cost is a major problem.

Vaginal hysterectomy for an undescended and enlarged uterus is still a very infrequent procedure in Malaysia. The operating time by experts is equivalent to those of abdominal hysterectomy. The above initial 11 cases could be carried out within a reasonable operating time. The good outcome of these initial cases is very encouraging and it is time that vaginal hysterectomy should play a bigger role in gynaecology in Malaysia.

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