Research Article

Evaluation of complications of abdominal and vaginal hysterectomy in non decent cases

Shreyaa Sriram[1*], U T Bhosale[2], Ramchandra Shriwastav[3]

[1]Junior Resident, [2]Professor and HOD, [3]Lecturer, Department of Obstetrics and Gynaecology, Bharati Vidyapeeth University Medical College and Hospital, Sangli, Maharashtra, INDIA.
Email: drshreyaa@gmail.com

Abstract

Introduction: Abdominal and vaginal hysterectomies are the two prominent operative modalities for various uterine conditions. However the indications for selecting a particular procedure in any setting may not be optimally defined. This study was undertaken to evaluate the appropriate route of hysterectomy in a hospital population for women with benign disease by comparing peri operative and post operative complications. **Method:** This experimental study was undertaken at the department of OBGY Bharati Hospital, Sangli, from Jan 2014 to June 2014. 50 subjects were equally divided into vaginal and abdominal hysterectomy groups by convenience sampling. The primary outcome measures were operative time, primary haemorrhage, wound infection, post operative analgesia, febrile morbidity, hospital stay and secondary haemorrhage and secondary outcome measures were estimated
Keywords: Ndvh, vaginal, abdominal, hysterectomy.

[*]**Address for Correspondence:**
Dr. Shreyaa Sriram, Junior Resident, Department of Obstetrics and Gynaecology , Bharati Vidyapeeth University Medical College and Hospital, Sangli, Maharashtra, INDIA.
Email: drshreyaa@gmail.com
Received Date: 10/01/2015 Revised Date: 18/01/2015 Accepted Date: 23/01/2015

Access this article online

Quick Response Code:

Website: www.statperson.com

DOI: 25 January 2015

INTRODUCTION

Hysterectomy, abdominal or vaginal hysterectomy is by far the most frequently performed elective major operation in Gynaecology[1]. It is said that the two are not competitive procedures but each has its own place in the operative armamentarium of the gynaecologist. As compared to the two routes, vaginal hysterectomy should be the route of choice because of short operating time, cost efficient and short hospital stay[2]. Hysterectomy by vaginal route must be practiced in all cases where there is an indication for hysterectomy in benign non prolapse cases. The vaginal route has mainly been restricted to the treatment of uterine prolapse, the reverse should be the case because fewer post-operative complications, no abdominal incision hence cosmetically approved by patient which allows earlier recovery and return to work[3]. There is ample opportunity to learn and master vaginal surgery[1].Hence it is best interest of the patient if vaginal route is mastered. To maximize the proportion of hysterectomies performed vaginally, gynecologists need to be familiar with surgical techniques for dealing with non-prolapsed uterus.

METHODS AND METERIAL

The study was carried out at bharatihospital, Sangli. A total of 50 Cases admitted to gynecology ward requiring hysterectomy for benign diseases were selected randomly and divided into two groups according to the type of surgery. In group 1, 25 patients were subjected to total abdominal hysterectomy and in Group 2 another 25 patients subjected to vaginal hysterectomy. The study was carried out over a 6months period from January 2014 to June 2014. A detailed history from the patient was taken and a thorough examination was done. This included complete physical as well as pelvic examination.

Inclusion Criteria

1. Uterus without descent,
2. With good mobility and
3. Size not more than 12-14 weeks size.

Exclusion Criteria

How to site this article: Shreyaa Sriram, U T Bhosale, Ramchandra Shriwastav. Evaluation of complications of abdominal and vaginal hysterectomy in non decent cases. *International Journal of Recent Trends in Science and Technology* January 2015; 13(3): 638-641 http://www.statperson.com (accessed 26 January 2015).

1. Uterine prolapse,
2. Associated adnexal pathology,

History of 2 or more serial abdominal surgeries or pelvic organ surgeries

Routine investigations were done such as

- Complete Haemogram,
- Urine analysis,
- Blood grouping and Rh-typing,
- Blood sugar,
- Serum Creatinine and Blood Urea,
- Cervical swab for culture and sensitivity,
- Pap smear,
- ECG,
- Chest X-ray,
- USG Abdomen and Pelvis,
- HIV,
- HBSAg was done.
- A written informed consent was taken from all patients after explaining the procedure.
- Spinal anaesthesia was used in most of our patients.

Operating time for Abdominal Hysterectomy was calculated from the start of skin incision to the closure of the skin incision and for vaginal hysterectomy from the start of incision at cervico-vaginal junction to the placement of vaginal pack. Blood loss was calculated by noting the number of Mops used during surgery. On an average ¼ soaked Mops contained 20 ml, ½ soaked 40 ml and fully soaked 100 ml. This is rough estimation of blood loss. Intra-operative complications like injury to the bladder/bowel/ ureter, hemorrhage was noted. Post operatively, all patients were meticulously followed. On 2nd post-operative day, Routine haemoglobin estimation and urine examination was done for culture and sensitivity. In case of abdominal wound infection, culture and sensitivity was done to know the type of organisms. Post-operative complications like fever, urinary tract infection, vaginal cuff cellulitis, abdominal wound infection were noted. All the patients were advised to attend the outpatient department two weeks after discharge from hospital to note their well-being or any late complications like vaginal discharge, urinary/bowel symptom

RESULTS

Table 1: Age distribution

Age in yers	Abdominal (%)	Vaginal (%)	Total (%)
30-39	7 (28%)	7 (28%)	14 (28%)
40-49	13 (52%)	14 (56%)	27 (54%)
50-59	5 (20%)	1 (4%)	6 (12%)
>60	--	3 (12%)	3 (6%)
Total	**25**	**25**	**50 (100%)**

Group	Mean±SD
Abdominal hysterectomy	44.4±8.3
Vaginal hysterectomy	44.2±0.3
't'=0.62	P>0.05

Table 2: Parity wise distribution

Parity	Abdominal (%)	Vaginal (%)	Total (%)
Nulli-P_1	1 (4)	2 (8)	3 (6)
P_2-P_4	17 (68)	17 (68)	34 (68)
P_5-P_7	7 (28)	6 (24)	13 (26)
Total	**25**	**25**	**50 (100)**

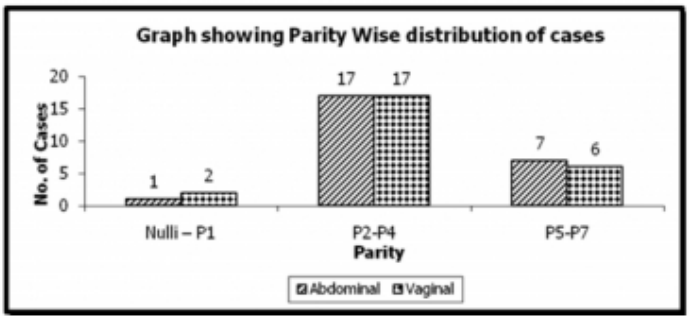


Table 3: Indications for surgery

Indication	Abdominal (%)	Vaginal (%)	Total (%)
Dub	5 (20)	12 (48)	17 (34)
Fibroid	8 (32)	8 (32)	16 (32)
Chronic Cervitics	8 (32)	3 (12)	11 (22)
Ovarian	2 (8)	0	2 (4)
Cervical dysplasia	1 (4)	0	1 (2)
Adenomyosis	1 (4)	1 (4)	2 (4)
Cervical polyp	0	1 (4)	1 (2)
Total	**5**	**25**	**50 (100)**

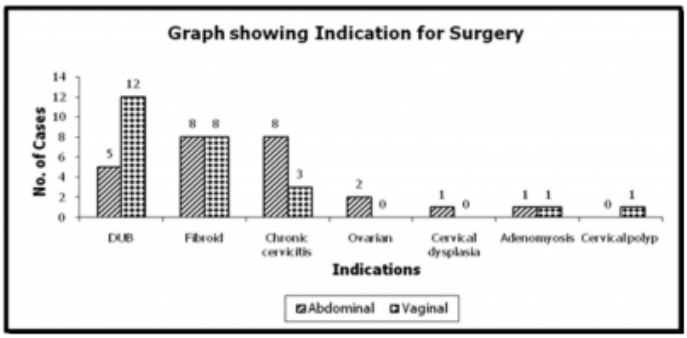


Table 4: Size of uterus in gestational weeks

Week	Abdominal (%)	Vaginal (%)	Total (%)
6-8	9 (36)	13 (52)	22 (44)
9-11	4 (16)	5 (20)	9 (18)
12-14	10 (40)	6 (24)	16 (32)
15-17	2 (8)	1 (4)	3 (6)
Total	**25**	**25**	**50 (100)**

T=1.82 P<0.05

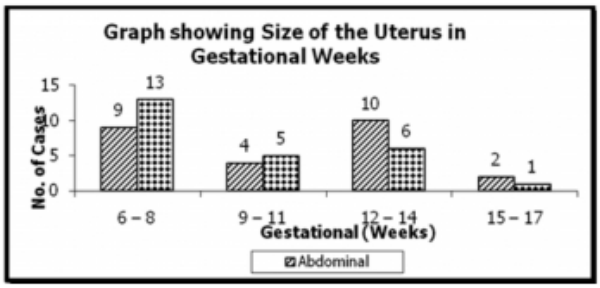


Table 5: Blood loss

Quantity of Blood (ml)	Abdominal (%)	Vaginal (%)	Total (%)
100-150	14 (56)	21 (84)	35 (70)
500-1000	11 (44)	4 (16)	15 (30)
Total	**25**	**25**	**50 (100%)**

Group	Blood losss (ml) Mean±SD
Abdominal	500±250
Vaginal	316±238
't=7.7	P<0.05

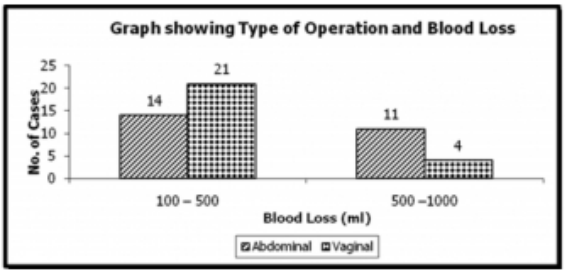


Table 6: Operating time for surgery

Time in min	Abdominal (%)	Vaginal (%)	Total (%)
0-60	3 (12)	17 (68)	20
60-120	18 (72)	8 (32)	26
120-180	4 (16)	-	4
Total	**25**	**25**	**50**

Group	Time in minutes
Abdominal	101±27.1
Vaginal	65±26.2
't=2.8	P<0.001

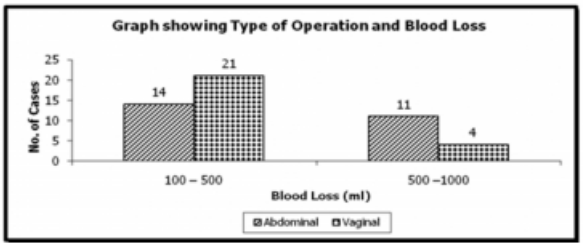


Table 7: Post operative complications

Complication	Abdominal (%)	Vaginal (%)
Fever	7 (28)	4 (16)
Urinary tract infection	5 (20)	3 (12)
Vaginal cuff cellulitis	6 (24)	11 (44)
Abdominal wound infection	3 (12)	-
Relaparatomy	1 (4)	-
Secondary suturing	2 (8)	-
Vaginal swab positive	7 (28)	10 (40)
No complications	9 (36)	17 (68)

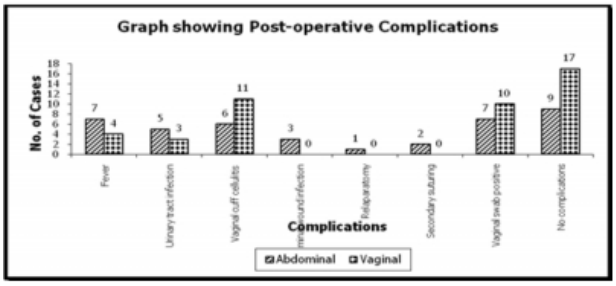
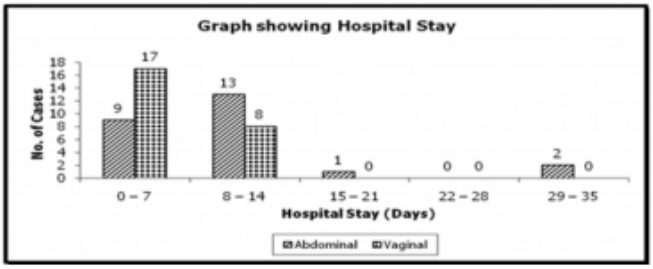


Table 8: late complications

Complication	Abdominal (%)	Vaginal (%)
Discharge	2 (8)	6 (24)
Vault Granuloma	-	5 (20)

Table 9: Hospital stay

No. of days	Abdominal (%)	Vaginal (%)	Total (%)
0-7	9 (36)	17 (68)	26 (52)
8-14	13 (52)	8 (32)	21 (42)
15-21	1 (4)	-	1 (2)
22-28	-	-	-
29-35	2 (8)	-	-
Total	**25**	**25**	**50 (100)**



DISCUSSION

It is well known fact that 70-80% of hysterectomies done for benign conditions are through abdominal route. Vaginal hysterectomies are usually performed for prolapse cases. The reason behind this is inadequate technical skills, presence of uterine enlargement makes vaginal route difficult. But with newer techniques like bisection, morcellation and myomectomy it has become easy to perform vaginal hysterectomy even in enlarged uterus in benign cases[4]. In our study most of patients were in the age group of 40-49 years of age. In our study mean parity is 3. Most common indication for abdominal hysterectomy is uterine fibroid and cervicitis followed by DUB. the commonest indication for vaginal hysterectomy in non descent cases is DUB followed by fibroid uterus and chronic cervicitis. The uterine size in gestational

weeks is compared with both routes, in present study, one patient had bladder injury during abdominal hysterectomy, which was a case of previous LSCS, No patient had any intra operative problem in vaginal hysterectomy. In present study, mean blood loss for abdominal hysterectomy was 500 ml and that for VH was less than 500. The mean operating time for abdominal hysterectomy was 101 minutes and that for VH was 65 minutes. Range between 30-120 minutes. In our study women undergoing abdominal hysterectomy had more febrile morbidity than vaginal hysterectomy, urinary tract infection is more in vaginal. post operative stay in the present study was more compared to other studies because most of out patients are from rural areas and from far places, who cannot come back for follow up studies. Our study shows that in patients without genital tract prolapse, vaginal hysterectomy is associated with significantly shorter hospitalization than abdominal hysterectomy. it is not surprising that patients reported less discomfort and faster recovery after vaginal hysterectomy in the immediate post - operative period. Abdominal hysterectomy maybe associated with a higher risk of post operative fever, while bleeding maybe more frequent with vaginal surgery. These findings support the view that vaginal hysterectomy should not be restricted to women with genital tract prolapsed alone.

CONCLUSION

All the patients with uterine prolapse submitted to vaginal hysterectomy for treatment of benign disease had some advantage in relation to abdominal hysterectomy. less intra operative blood loss, less febrile morbidity, low postoperative complications, faster recovery, less hospital stay demonstrate that the vaginal route should be the choice of operation for non descent cases. vaginal hysterectomy is least invasive route, safe and effective procedure for benign non prolapsed cases. besides the faster recovery and lower incidence of bleeding and other complications, vaginal route lowers cost for health system. it is undeniable that the simple vaginal hysterectomy is less invasive than laproscopy.

REFERENCES

1. Sheth SS. Vaginal hysterectomy.In: PuriR, Malhotra N. eds. Operative Obstetrics and Gynaecology. New Delhi. Jaypeebrother's medical publishers.2009:499-510.
2. Sheth SS, Paghdiwalla K P. In: Saraiya UB, Rao A K, ChateerjeeA.eds .Principles and Practice of obstetrics and Gynaecology.2ndedition. New Delhi. Jaypeebrothers medical publishers.2003.374-30.
3. Goel N, Rajaram S, GhummanS.eds .Step by Step Non-Descent vaginal hysterectomy.New Delhi. Jaypeebrothers medical publishers.
4. Dewan R, Agarwal S, Minocha B, Sen SK. Non-descent Vaginal Hysterectomy –An Experience. J ObstetGynecolInd .2004; 54(4):376- 8.
5. Ikram M, Saeed Z, Saeed R, Saeed M. Abdominal versus vaginal hysterectomy. Professional Med J 2008; 15:486-91.
6. Iftikhar R. Vaginal hysterectomy is superior than abdominal hysterectomy. J Surg Pak 2008; 13:55–8.
7. Akingba DH, Deniseiko-Sanses TV, Melick CF, Ellerkmann RM, Matsuo K. Outcomes of hysterectomies performed by supervised residentsvs those performed by attendings alone. Am J Obstet Gynecol 2008; 199:673.e1-6.
8. Oláh KS, Khalil M. Changing the route of hysterectomy: the results of a policy of attempting the vaginal approach in all cases of dysfunctional uterine bleeding. Eur J Obstet Gynecol Reprod Biol 2006; 125:243–7.
9. Kovac SR. Guidelines to determine the route of hysterectomy. Obstet Gynecol 1995; 85(1):18–23.
10. Cardosi. J.Richard. Determining the best route for hysterectomy .The journal of family practice .July 2002; 14(7):.
11. Dicker RC, Greenspan JR, Strauss LT etal. Complications of vaginal and abdominal hysterectomy among women of reproductive age in the United States. Am J Obstet G ynecol.982; 144; 841-8.
12. Geoff. McCracken, Guylaine G. Lefebvre. Vaginal hysterectomy: Dispelling the myths. JOGC 2007; 424-7.
13. Chakraborty S, Goswami S, Mukherjee P, Sau M. Hysterectomy... which route. Journal of Obstet and Gynecol of India. 2012; 61(5): 554- 7.
14. Royal KK,Goyal MM ,Singh S, Malhotran N, Kumar S. Archives of Gynaecology 2011; 284(4);907-12.

Source of Support: None Declared
Conflict of Interest: None Declared