



RETROSPECTIVE ANALYSIS OF VAGINAL VERSUS ABDOMINAL HYSTERECTOMY

Gynecology

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ABSTRACT

There are various surgical procedures for hysterectomy. The aim of the study is to compare vaginal hysterectomy and abdominal hysterectomy. A retrospective, descriptive study of patients, who underwent hysterectomy at Karuna Medical College Hospital in Kerala during the period April 2019 to February 2020, was conducted. The variables included like age, BMI, socioeconomic status, parity, education, co-morbidities, gynecological history and duration of surgery, intra-operative and postoperative complications. The data was collected from medical records after getting Ethical Committee approval. The results showed that vaginal hysterectomy was performed for patients with uterovaginal Prolapse. Abdominal hysterectomy had various indications. Vaginal hysterectomy is acceptable by majority of the patients as it has stood the test of time and the recovery is faster. As vaginal hysterectomy is feasible for benign gynecological conditions like AUB, even larger fibroids by morcellation, operative skill and techniques should be encouraged and training offered to residents.

KEYWORDS

Vaginal hysterectomy, Versus, Abdominal hysterectomy, Prolapse.

1. INTRODUCTION

Hysterectomy was performed by different routes both vaginal and abdominal. The predisposition for either route solely depends on the surgeon's decision. The main deciding factors are the age, the gynecological pathology, obesity, prior surgeries, choice of patient and also the skill of the surgeon. The vaginal hysterectomy (V.H) has got a better effect on the patient life style and return to daily activity. The costs of the hospital, length of hospital stay are reduced here.

It is also a worldwide acceptable procedure; thanks to new advancement in anesthesia, newer generation of antibiotics, blood transfusion availability the risk is negligible. This novel method is suitable for obese, with dense adhesions, even without prolapse in patients with AUB, big fibroids with volume reduction possible by newer techniques like intra-myometrial coring, morcellation and corporal bisection.

2. METHODOLOGY

The study is a retrospective descriptive study of 200 females who underwent VH, and 200 females who underwent abdominal hysterectomy (A.H). The statistical design is Chi square. The statistical data analyzed by software version SPSS.

3. AIM

The aim of the study is to compare vaginal versus abdominal hysterectomy in order to evaluate the most efficient route for surgery.

The inclusion criteria were the hysterectomy performed at Karuna Medical College from April 2019 to Feb 2020.

Exclusion criteria were the patients operated elsewhere and referred for various reasons.

	VH	TAH	p-value
Age			<0.001
20-30	6 (3%)	25 (12.5%)	
31-40	14 (7%)	38 (19%)	
41-50	28 (14%)	105 (52.5%)	
51-60	60 (30%)	32 (16%)	
61-70	92 (46%)	0 (0%)	
Parity			
1-3	92 (46%)	185 (92.5%)	<0.001
4-6	108 (54%)	15 (7.5%)	
UTERINE SIZE			
Atrophied	152 (76%)	25 (12.5%)	<0.001
Normal	40 (20%)	55 (27.5%)	
6-8 weeks	8 (4%)	90 (45%)	

>10 weeks	0 (0%)	30 (15%)	
FAMILY HISTORY			
present	94 (47%)	142 (71%)	<0.001
Not present	106 (53%)	58 (29%)	

The data was collected by SPSS version. The variable like age, parity, BMI, Socioeconomic status, educational status, intra operative complication, post operative complication, time taken for surgery and the hospital stay.

The standard deviation was found by analysis of Chi square test. P value significance >0.05 is noted.

4. RESULTS

	VH	TAH	p-value
Comorbidities			
DM	45 (35.4%)	45 (35.4%)	0.549
HTN	38 (29.9%)	38 (29.9%)	
dyslipidemia	16 (12.6%)	16 (12.6%)	
Bronchial asthma	6 (4.7%)	2 (1.6%)	
Thyroid	20 (15.7%)	20 (15.7%)	
Ca breast	2 (1.6%)	6 (4.7%)	
INTRA OP			
Bladder injury	1 (100%)	6 (85.7%)	0.686
Bowel injury	0 (0%)	1 (14.3%)	
POST OP			
Fever	45 (22.5%)	18 (9.3%)	<0.001
Vault Infection	8 (4%)	23 (11.9%)	
No complications	129 (64.5%)	159 (79.5%)	
Vault hematoma	8 (4%)	0 (0%)	
Pelvic abscess	10 (5%)	0 (0%)	
Hospital Stay			
3-5 days	160 (80%)	146 (73%)	0.234
6-8 days	24 (12%)	30 (15%)	
>8 days	16 (8%)	24 (12%)	
	VH	TAH	p-value
FOLLOW UP			
Vault prolapse	8 (4%)	0 (0%)	<0.001
Pelvic abscess	10 (5%)	4 (2%)	
Discharge	12 (6%)	16 (8%)	
Urethral syndrome	30 (15%)	8 (4%)	
No complication	90 (45%)	172 (86%)	
Dyspareunia	20 (10%)	0 (0%)	

Stress incontinence	30 (15%)	0(0%)	
DURATION OFSURGERY			
<2hrs	80 (40%)	187 (93.5%)	<0.001
2-3 hrs	96(48%)	9 (4.5%)	
3-4 hrs	24 (12%)	4 (2%)	
ADHESIONS			
During surgery	21 (10.5%)	21 (10.5%)	1.00
Bladder injury	1 (0.5%)	1 (0.5%)	
ESTIMATED BLOOD LOSS			
<200ml	163(81.5%)	163(81.5%)	1.00
200-500ml	35 (17.5%)	35 (17.5%)	
>500 ml	2 (1%)	2 (1%)	
BLOOD TRANSFUSION			
Pre operative	72 (36%)	66 (33%)	0.635
Intra operative	28 (14%)	34 (17%)	
Post operative	20 (10%)	15 (7.5%)	
No transfusion	80 (40%)	85 (42.5%)	

The total number of vaginal and abdominal hysterectomy performed were 400 of which the abdominal hysterectomy were 50% while VH is 50%. The most common reason for AH was leiomyoma .For VH it was Prolapse (90 %).

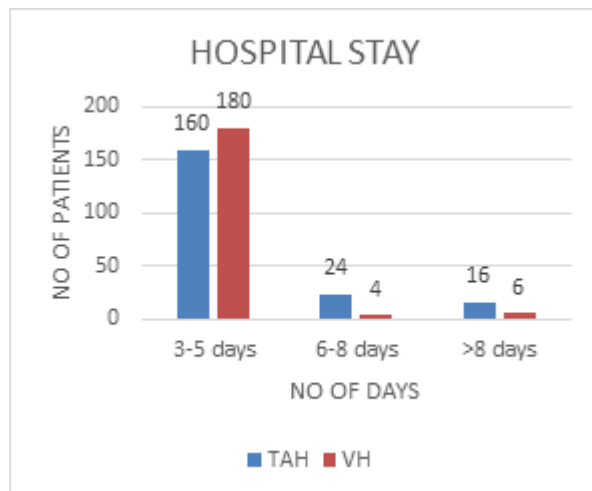
The majority of the group between 41 -50 years had AH while age group 60-70 had VH. Since the indication was prolapse. The age group showed significant P value.

Regarding parity the VH group was 4-6 and AH 1-3. The parity showed a different and P value was <0.001.

5.DISCUSSION

The indication for AH depicts the multiple variation but the VH had only uterovaginal prolapse.The other indication for VH other than prolapse was lacking in our study to be mentioned. Although there is a much controversy on the route of procedure till today VH has been the method of choice [1]

The postoperative, intraoperative and hospital stay shown in the table. (2)



The patient moves out of the bed very early when compared to the AH group.[2] The post operative and intra operative complications like bowel injury, ureter and bladder injury are more in AH. [3]VH is often justified surgery in patients with cystocele, or mild pelvic floor weakness. [4] The morbidity and mortality rate are higher in AH.[5]The incidence of Ureteral injury is estimated to be 0.2 to 6 %, for the LH, 0.02 to 0.5% for VH, for AH it is 0.03 to 2%. [6]Thanks to the advent of higher antibiotics, good anesthetic care, skill of the surgeon and the multidisciplinary treatment followed. Nomortality noticed in our study.

The cost of surgery is more in AH than VH. Inspite of the so many advantages VH seems to be soon extinct as the present generation lack the skill in operating VH for benign gynecological conditions.[7]

Much controversy on the route of hysterectomy procedure till today

VH has been the method of choice and popular method acceptable by most of the patients.The hospital stay was shorter by 3-4 days than AH. [8].The VH displays most advantages for the patient as the operation time is shortest for VH and lowest complications for VH[9]. The post operative complications are more with AH.The conclusion suggests that AH is inferior to VH and LH. (10) There were few randomized trials comparing VH and LH for post operative complications, operative time, hospital stay and recovery. (11)A Cochrane Review in 2015 declared that VH appears to be superior, as VH patients show fast recovery to daily activities. (12)

6.CONCLUSION

- 1) The limitation in our study is this is a retrospective study unlike a prospective study wherein ample opportunity is not available to gather data personally from patients.
- 2) The unique technique for vaginal route for gynaec cases like AUB, Fibroid (benign conditions) and Laparoscopic Assisted Vaginal Hysterectomy and Laparoscopic Supra cervical Hysterectomy are missing. It is very disappointing to see when the Western world has gone ahead of the time wherein comparative study is performed like - Robotic surgery versus Laparoscopic hysterectomy. We are still lacking and far behind. There should be ample opportunities for the young enthusiastic to learn the modern trends and surgical skill from developed countries.

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