



# An Overview of Hysterectomy At Tertiary Care Centre

## KEYWORDS

Hysterectomy, dysfunctional uterine bleeding, utero vaginal prolapse.

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**ABSTRACT** **BACKGROUND AND OBJECTIVE:** Term "hysterectomy" though means removal of uterus, in practice it has a much wider classification depending upon the indication. Aim of this study was to analyse indication, age prevalence, surgical approach & complication of hysterectomies at government tertiary care centre in Rajasthan, India.

**METHODS:** Present study is carried out at J.K.Lon mother & child hospital, Government medical college Kota, Rajasthan. It involved all women who underwent hysterectomies in span of six month (from 1st march 2015 to 31st august 2015).

**RESULTS:** Most common surgical approach was abdominal ie (66.6%) followed by vaginal (33.3%). Most common indication were dysfunctional uterine bleeding ( 30.9%) & utero vaginal prolapse ( 30.9%), Overall complication rate was 4.8%.

**CONCLUSION:** The conditions that may lead to a hysterectomy cause discomfort and inconvenience rather than threaten life. Hysterectomy is the definitive treatment for dysfunctional uterine bleeding and utero vaginal prolapse patient in most studies it has a higher rate of patient satisfaction. Hysterectomy like any other surgical procedure is associated with risk of complications therefore indication should be carefully evaluated .

## 1. Introduction

There is considerable variation in policy concerning hysterectomy in healthcare centers and gynecological programs. Hysterectomy is the second most frequently performed major surgical procedures on women all over the world, next only to caesarean. In US, approximately 600,000 hysterectomies are performed each year<sup>[1]</sup>. Although hysterectomy rates in Western countries are diminishing owing to a generally more conservative approach, this operation is still widely performed.<sup>[2]</sup>

Indications of hysterectomy vary from benign condition to malignancies of genital tract. At times it is done without removal of the cervix (supracervical hysterectomy) or with removal of adnexa (hysterectomy with salpingo-oophorectomy). It can also be a part of staging laparotomy or radical hysterectomy. Hysterectomy can be performed abdominally, vaginally or through abdominal ports with help of a laparoscope. Approach depends on surgeon's preference, indication for surgery, nature of disease, and patient characteristics.

Aim of this study was to analyze indications, age prevalence, surgical approach and complications of hysterectomies, and correlation of preoperative diagnosis with post operative finding of all hysterectomies, performed in a government tertiary centre in Rajasthan. As there are no much hysterectomy analysis published from India, present study may provide a basis for a future audit of our gynaecologic practice and for comparison of our practice with others.

## 2. Material & Method

Present study is carried out at J.K.Lon mother & child hospital, Government medical college Kota, Rajasthan, India, in span of six month (from 1st march 2015 to 31st august 2015). It include all women who underwent hysterectomies for gynaecological & obstetric causes as elective or emergency procedure. There were no exclusion criteria. Case records were reviewed to collect patient characteristics, indication for surgery, approach, complications, and length of hospital stay. Abdominal hysterectomy included subtotal hysterectomy, hysterectomy with unilateral salpingo- oophorectomy (TAH with USO), and bilateral salpingo ophorectomy (TAH with BSO),

Vaginal hysterectomy with pelvic floor repair (VH with PFR) for utero vaginal prolapse and non descent vaginal hysterectomy (NDVH) done for indication other than utero vaginal prolapse .Various indication were reviewed, in term of age, surgical approach and complications of hysterectomy (Abdominal or Vaginal). As a part of sub-analysis, indications where hysterectomy was performed in less than 30 years of age were carefully reviewed. Intraoperative blood loss, injury to vital structures, and conversion of planned route were compared among various approaches.

## 3. Result

In the year 2015 from march to august a 2882 women were admitted for gynaecological complain. Out of which 445 patients were treated with some major surgical procedure which included 291 hysterectomies. Thus 10% of total gynaecological admissions ended up with hysterectomy. Around 65% of major gynaecological surgeries were

hysterectomy. Records were obtained and information was analyzed. None of the cases were excluded from final analysis.

**Table 1:- Approach of hysterectomy in relation to age group of the women.**

Abdominal ( 66.6 % ) n = 194				Vaginal ( 33.3 % ) n = 97		Total
Age in yrs	Sub Total	TAH + USO	TAH + BSO	VH + PFR	NDVH	
21-30	6	1	1			8
31-40	1	8	53	19	0	81
41-50			109	32	7	148
51-60			12	22		34
61-70			1	13		14
71-80			1	3		4
81-90			1	1		2
<b>Total</b>	<b>7</b>	<b>9</b>	<b>178</b>	<b>90</b>	<b>7</b>	<b>291</b>

Most common surgical approach was abdominal ( n=194 [66.6%]) followed by vaginal n=97[33.3%].

Most (n=148[50.8%]) of patients who underwent hysterectomies were in age group 41-50 yr, about (n=81[27.8%]) patients who underwent hysterectomies fall in age group 31-40 yr.

In age group (21-30 yr) , six patients had subtotal hysterectomies due to obstetric causes (PPH and Rupture uterus). One patient had TAH with USO at 30 yr (family completed) due to symptomatic fibroid of 8\*6 cm. One more patient had TAH with BSO at 30 yr was symptomatic (family completed) had endometrial fundal polyp of size 5\*3 cm. A DUB patient at age of 40 yr had elective surgery but due to dense adhesion between bladder cervix and vagina subtotal hysterectomy decided.

In age group 51 & above 15(5.1%) patients had abdominal & 54(18.5%) patients had vaginal hysterectomy due to increase incidence of uv-prolapse in this group.

**Table 2(A) :- Elective versus Emergency hysterectomy ( including obstetrics )**

HYSTERECTOMY	NO. OF PATIENT	%
ELECTIVE	285	97.9%
EMERGENCY	6	2.1%
TOTAL	291	100

**Table 2(B) :- Causes of Emergency hysterectomy**

Causes of hysterectomy	NO. OF PATIENT	%
Rupture of uterus	3	50.0%
PPH	3	50.0%
TOTAL	6	100%

Most of the hysterectomy done as elective procedure (n=285[97.7%]) only six(n=6[2.1%]) hysterectomies done as emergency procedure because of obstetric indication as 3 PPH & 3 rupture of uterus.

All emergency hysterectomy were for obstetric cause, three patient were near 30 year of age, main aim of these hysterectomy was life saving due to PPH & Rupture uterus.

**Table 3 :- Indication of hysterectomy ( an overall view )**

Indications	Number of patients (n)	Percentage (%)
DUB	90	30.9%
Prolapse III degree	90	30.9%
Fibroid	55	18.9%
Adenomyosis	15	5.2%
Chronic PID	15	5.2%
Ovarian tumor (benign)	7	2.4%
Endometrial hyperplasia	3	1.0%
Endometrial carcinoma	3	1.0%
PPH	3	1.0%
Ruptured uterus	3	1.0%
Cervical polyp	2	0.7%
Ovarian tumor (malignant)	2	0.7%
Cervical cancer	1	0.3%
Postmenopausal bleeding	1	0.3%
Endometrial polyp	1	0.3%
<b>Total</b>	<b>291</b>	<b>100%</b>

\* Some women had more than one indication.

Most common indication for hysterectomy were uterovaginal prolapse (n=90[30.9%]) and dysfunctional uterine bleeding (DUB) n=90(30.9%) followed by fibroid uterus (n=55[18.9%]).

**Table :- 4 Indication of hysterectomy in relation to the approach.**

Indications	Abdomi- nal			Vaginal		Total
	Sub Total	TAH + USO	TAH + BSO	VH + PFR	NDVH	
DUB	1	2	81	6	90	
Prolapse III degree				90		
Fibroid		4	50	1	55	
Adenomyosis			15		15	
Chronic PID		1	14		15	
Ovarian tumor (benign)			7		7	
Endometrial hyperplasia			3		3	
Endometrial carcinoma			3		3	
PPH	3				3	
Ruptured uterus	3				3	
Cervical polyp			2		2	
Ovarian tumor (malignant)			2		2	
Cervical cancer			1		1	
Postmenopausal bleeding			1		1	
Endometrial polyp			1		1	
<b>Total</b>	<b>7</b>	<b>7</b>	<b>180</b>	<b>90</b>	<b>270</b>	

Most common surgical approach in patients with DUB was abdominal (n=84 [93.3%]), six patients of DUB had NDVH ( n=6 [6.6%]), and one patient of DUB had subtotal hysterectomy due to adhesion. surgical approach in patients with UV prolapse was VH with PFR(n=90[100%]). Most of the fibroid patients treated abdominally(n=54[98.1%]),only (n=1[1.8%]) had NDVH. Surgical approach for patients of , adenomyosis , chronic PID, benign ovarian tumor, endometrial hyperplasia, endometrial carcinoma, PPH, rupture uterus, benign cervical polyp,ovarian malignant tumor , cervical cancer, post menopausal bleeding, endometrial polyp was abdominal.

In our study six (3%) patients of abdominal approach had wound infection and two had re-suturing for that, seven

(3.6%) patient had blood loss more than 1000 ml & had post operative blood transfusion ( including sub-total hysterectomy and hysterectomy for ovarian carcinoma), one patient undergone TAH with BSO had bladder base haematoma, one patient with abdominal approach had sub acute intestinal obstruction managed conservatively, one TAH with BSO had converted to sub-total hysterectomy due to adhesion ,mean duration of stay for abdominal & vaginal approach was eight days & six days respectively.

### Discussion

In span of six month we have done 291 hysterectomies, most of these were abdominal approach (66.6%) followed by vaginal (33.3%), observations from Canada (abdominal 78%, vaginal 14%, and laparoscopic 5.9%)<sup>[3]</sup> & Hong Kong the (abdominal 70.2%, vaginal 15.9%, and laparoscopic 13.8%)<sup>[4]</sup> showing little bit lower incidence of vaginal hysterectomies, Higher incidence of vaginal approach in our institution is due to higher number of uv-prolapse pt. coming from rural background, Most of them had poor socio-economic status, two or more vaginal deliveries, and lax perineum.

Most common indication were DUB ( 30.9%) & utero vaginal-prolapse ( 30.9%), Hysterectomy is the definitive treatment for DUB, in most studies it has a higher rate of patient satisfaction<sup>[5]</sup> .A retrospective review of hysterectomies at a tertiary care centre in central India shows that indication of hysterectomy was DUB in 39.13% & fibroid in 29.13%<sup>[6]</sup> .

One more study from Islamabad shows that indication of hysterectomy was DUB in 35.5% & fibroid in 31.1%<sup>[7]</sup>. Data from Hong Kong, fibroids constituted even higher proportion of indications for abdominal (73.7%) and genital prolapse was the most common indication (96.2%) for vaginal hysterectomy<sup>[4]</sup>.

The conditions that may lead to a hysterectomy cause discomfort and inconvenience rather than threaten life. The diversity of symptoms can have an immense influence on a woman's quality of life affecting aspects of her daily routine, general health and sense of wellbeing.<sup>[8]</sup>

When a hysterectomy is decided upon, there are many circumstances that should be taken into account. Patient opinion and surgeon integrity are transcendental. Many women are not even informed of which hysterectomy they are about to undergo when admitted to hospital. Patients should be informed of the characteristics of the different routes and their benefits and disadvantages.

As any other surgery, hysterectomy is also associated with intra operative and postoperative complications. Rates of various complications with hysterectomy have been reported in the range from 0.5% to 43%<sup>[9]</sup>.

Wrongly some decisions are made during surgeries without the scientific evidence to back them up such as performing bilateral salpingo-oophrectomy this subject deserve extensive discussion.

### Conclusion:

The conditions that may lead to a hysterectomy cause discomfort and inconvenience rather than threaten life. Hysterectomy is the definitive treatment for dysfunctional uterine bleeding & utero vaginal prolapse patient in most studies it has a higher rate of patient satisfaction. Hysterectomy like any other surgical procedure is associated with

risk of complications therefore indication should be carefully evaluated .

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