

A retrospective assessment to determine the incidence and indication for hysterectomy in tertiary care facility

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Abstract

Aim: to study the incidence and indication for hysterectomy in the study population.

Materials and Methods: A Retrospective study was conducted in Department of Pathology, over the period from June 2015-May 2017. Hysterectomy specimen with or without unilateral or bilateral adnexa received in the department. The specimens were analyzed in detail macroscopically for various parameters like size, external surface, and consistency and cut sections.

Results: Out of total 10230 histopathological specimens received at department of Pathology from June 2015 to May 2017, hysterectomy specimens were 609 accounting for of total specimen received. Hysterectomy specimens were received from a wide range of age groups varying from 15 years to 81 years. The average age for undergoing hysterectomy was 43.05 years. Majority of cases (44.01%) were from the 5th decade followed by 4th decade (36.95%). Among the 609 cases, the major clinical diagnosis for which hysterectomy was performed included DUB (32.35%), Fibroid (29.39%) and Prolapse (16.09%). 6 Hysterectomies were performed for malignant lesions (Carcinoma of cervix, Endometrial carcinoma and Ovarian malignancy) and 24 Obstetrics Hysterectomies were done.

Conclusion: Maximum numbers of patients were from the 5th decade followed by 4th decade. DUB, Fibroid and Uterine Prolapse were the major clinical diagnosis before Hysterectomy was done.

Keywords: Hysterectomy, DUB, fibroid and uterine prolapse

Introduction

The uterus or womb is the major female reproductive organ which provides mechanical protection and nutritional support for the developing fetus. The uterus is subject to a various disorder, the most common of which result from endocrine imbalance, complications of pregnancy and neoplastic proliferations. Cervix is the most common site for occurrence of non-neoplastic and neoplastic lesions in the genital tract of women ^[1]. Together with lesions that affect cervix, the lesions of the corpus of the uterus, the endometrium, fallopian tubes and ovaries account for most patients visits to gynecologist ^[1].

Abnormal uterine bleeding, uterine prolapse and pain are among the most common presentation of lesions of uterus, cervix and bilateral adnexa ^[2]. Fibroids are the most

common benign tumors in the females and typically found during the middle and later reproductive years [3]. Cervical cancer is the third most common malignancy and the fifth most common cause of cancer mortality in women worldwide [4]. Endometrial carcinoma is the most common gynecological cancer in developed countries and second most common primary malignancy in female genital tract [5].

Hysterectomy is a widely used treatment modality in a variety of the lesions of the uterus, cervix and bilateral adnexa. Every Hysterectomy specimen should be subjected to histopathological examination. Histopathological analysis correlates well with the pre-operative clinical diagnosis for Hysterectomy [6].

The present study is undertaken to study the incidence and indication for hysterectomy in the study population.

Materials and Methods

A Retrospective Histopathological study was conducted in Department of Pathology, over the period from June 2015- May 2017.

Methodology

The materials for this study was obtained from hysterectomy specimen with or without unilateral or bilateral adnexa received in the department. The specimens were analyzed in detail macroscopically for various parameters like size, external surface, and consistency and cut sections.

Tissue were fixed and preserved in formalin, then passed through ascending grade of alcohol and xylene and finally embedded in melted paraffin wax. Then blocks were prepared, single block was made for each section, thin sections of 4 to 5 microns thickness were cut, Slides were be prepared and stained by H & E stain.

The non-neoplastic and neoplastic lesions from representative sections were studied and classified according to Modified World Health Organisation (WHO) classification 2003 and staging is done according to International Federation of Gynaecology and Obstetrics (FIGO) staging.

Results

Table 1: Incidence of hysterectomy specimens

	Number of Specimens	Percentage
Total specimens	10230	100%
Hysterectomy specimens	609	5.95%
Others specimens	9621	94.05%

Out of total 10230 histopathological specimens received at department of Pathology from June 2015 to May 2017, hysterectomy specimens were 609 accounting for of total specimen received.

Table 2: Age wise distribution of hysterectomy specimens

Age (years)	Number of cases	Percentage
<20	02	0.33%
21-30	37	6.08%
31-40	225	36.95%
41-50	268	44.01%
51-60	53	8.70%

61-70	23	3.77%
>71	01	0.16%
Total	609	100%

Hysterectomy specimens were received from a wide range of age groups varying from 15 years to 81 years. The average age for undergoing hysterectomy was 43.05 years. Majority of cases (44.01%) were from the 5th decade followed by 4th decade (36.95%). Hysterectomy was done in 2 patients of <20 years age, 1 of these patient had developmental Mullerian duct abnormalities and other was mentally retarded patients for whom social hysterectomy was done.

Table 3: Clinical Diagnosis for which Hysterectomy was performed

Clinical Diagnosis	Number of cases	Percentage
Adenomyosis	54	8.87%
Dub	197	32.35%
Fibroid	179	29.39%
Tubo-ovarian mass & cyst	39	6.40%
Prolapse	98	16.09%
Endometrial carcinoma	2	0.33%
Cervical neoplasm	2	0.33%
Obstetrics hysterectomy	24	3.94%
Others	14	2.30%
Total	609	100%

Among the 609 cases, the major clinical diagnosis for which hysterectomy was performed included DUB (32.35%), Fibroid (29.39%) and Prolapse (16.09%). 6 Hysterectomies were performed for malignant lesions (Carcinoma of cervix, Endometrial carcinoma and Ovarian malignancy) and 24 Obstetrics Hysterectomies were done.

Discussion

In the present study total 609 hysterectomy specimens were studied and findings were compared with various studies of other authors from different part of India and World.

Table 4: Age Incidence Comparison with Other Series

Age	Usha <i>et al.</i> (2017) (454 Cases) ^[7]	Talukder <i>et al.</i> (2007) (328 Cases) ^[8]	Ticku <i>et al.</i> (2017) (376 Cases) ^[9]	Present Study (609 Cases)
<20	0.22%	1%	0%	0.33%
21-30	2.64%	6.62%	2.66%	6.08%
31-40	25.11%	37.50%	35.90%	36.95%
41-50	50.22%	39.34%	41.76%	44.01%
51-60	14.54%	10.98%	13.57%	8.70%
61-70	6.17%	3.66%	4.52%	3.77%
>70	1.10%	0.3%	1.59%	0.16%

Findings in Present Study show maximum number of patient were in 41-50 years of age group (44.01%) which is comparable to other series as shown in Table above.

Table 5: Comparison of Indications of Hysterectomy with Other Series

Indication for Hysterectomy	Vandana <i>et al.</i> (2016) [10]	Gupta <i>et al.</i> (2010) [6]	Vijay Sreedhar <i>et al.</i> (2016) [12]	Present study
Adenomyosis	12.2%	10.89%	7.5%	8.87%
Dysfunctional uterine bleeding	10%	7.72%	42%	32.35%
Fibroid	39.3%	34.08%	24%	29.39%
Prolapse	25.1%	40%	7.5%	16.09%
Ovarian cyst/tumors	2.1%	4.35%	12%	6.40%
Carcinoma cervix	4.7%	1.78%	3%	0.51%

Above Table shows comparison of indication of Hysterectomy with Other studies. The most common indications were Dysfunctional Uterine Bleeding (32.35%) and fibroid (29.39%) in our study which are similar to findings of study of Vijay Sreedhar *et al.* Other Indications of Hysterectomy like Prolapse, Adenomyosis, Ovarian mass and Carcinoma of cervix and endometrium may also correlate closely.

Conclusion

609 consecutive Hysterectomy specimens submitted to Department of Pathology at our institute during June 2015 to May 2017 were studied clinically and Histopathologically. Maximum numbers of patients were in age group 41-50 years (44.01%) with average age was 43.05 years. DUB (32.35%), Fibroid (29.39%) and Uterine Prolapse (16.09%) were the major clinical diagnosis before Hysterectomy was done.

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