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CLINICOPATHOLOGICAL STUDY OF 500 CASES OF HYSTERECTOMY

Pathology

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ABSTRACT

Introduction: Study of clinical indications of hysterectomies and their histopathological diagnosis is of importance since hysterectomy is one of the commonest surgeries performed in gynaecological practices all over the world. Histopathological evaluation is required for a definitive diagnosis.

Objectives: The purpose of this study is to cor relate the clinical indications of hysterectomy with the histopathological diagnosis and to evaluate the incidence of common pathologies encountered in this region, along with age distribution.

Material and methods: This prospective study included 500 consecutive cases of hysterectomies received in the department of pathology over a period of about eight months from January 2017 to August 2017.Clinical data were noted from the case records ,which included age, presenting symptoms, USG findings and clinical indication for hysterectomy . Histopathological diagnosis was made and correlated with the clinical indication.

Results: In our study the commonest pathology found on histopathological examination was leiomyoma followed by atrophic endometrium of prolapse uterus.

Conclusion: Clinical indications correlated well with histopathological findings. Histopathological examinationis a definitive tool for diagnosis and management of the patient.

KEYWORDS

Hysterectomy, Leiomyoma, Dysfunctional Uterine Bleeding.

INTRODUCTION

Hysterectomy is the commonest gynaecological surgery in pre and postmenopausal women all over the world[1] . It is the definitive treatment for many of its indications both benign and malignant such as fibroids, utero-vaginal prolapse, adenomyosis, endometriosis, gynaecological cancers, obstetric complications, dysfunctional uterine bleeding and pelvic inflammatory disease. [2]

Hysterectomy can be performed either by abdominal route or vaginal route.The route of hysterectomy is determined by the skill, experience and the preference of the operating gynaecologist.[3] Total abdominal hysterectomy is the procedure of choice in conditions other than utero-vaginal prolapse.[4]

Histopathological examination of hysterectomy specimens is important and necessary for ensuring and confirming diagnosis which has great impact on management of the patient.[5]

The purpose of this study is tocorrelate various clinical indications of hysterectomy with their histopathological diagnosis. This study also reviews the age incidence and the incidence of common pathology seen in hysterectomy specimens in this region.

MATERIALAND METHODS

The present study was conducted in the department of pathology, J.L.N. Medical College Ajmer from January 2017 to August2017. During this period five hundred consecutivespecimens of hysterectomies with or without salpingo –oophorectomy submitted in the department of pathology were reviewed. Detailed clinical history, including age, clinical presentation and indication for hysterectomy along with USG findings were recorded. Hysterectomy specimens received were fixed in 10% formalin. Gross features of the hysterectomy specimens were noted and multiple representative bits were taken, processed and paraffin embedded. The blocks were sectioned at 4-5 microns and sections were stained by haematoxylin and eosin (H&E) Stain. A detailed microscopic examination was done and the histopathological diagnosis made was correlated clinically.

Cases of hysterectomies performed for obstetric indications were excluded from this study.

OBSERVATIONS

A total of five hundred consecutive hysterectomy specimens received in the department of pathology during the nine month period of study were reviewed. The age range of patients in our study was between 26-70 years. Of this 242 cases(48.4%) were in the age group of 41-50 years which is the most common age group in our study followed by 150 cases(30%) falling in the age group 31-40 years. Table -1 shows the age distribution of hysterectomy cases.

Table 1- Age distribution of hysterectomy cases

AGE	NUMBER OF CASES	PERCENTAGE
21-30 YEARS	14	2.8%
31-40 YEARS	150	30%
41-50 YEARS	242	48.4%
51-60 YEARS	59	11.8%
61-70 YEARS	35	7%

The commonest indication of hysterectomy in our series was dysfunctional uterine bleeding (DUB) -262 cases (52.4%) followed by prolapse uterus - 108 cases(21.6%) and leiomyoma-100 cases(20%). Others were PID, adenomyosis, ovarian mass and polyps.Table -2 shows the various clinical indications for hysterectomies.

Table -2 Indications for hysterectomy

INDICATION	NUMBER	PERCENTAGE
DUB	262	52.4
Prolapse	108	21.6
Leiomyoma	100	20.0
Adenomyosis	11	2.2
Polyp	7	1.4
PID	6	1.2
Ovarian mass	6	1.2

On histopathological examination the most common pathology identified in our study was leiomyoma at 27.6% (138 cases),followed by atrophic endometrium in cases of prolapse uterus at 21.2% (106 cases). This was followed by adenomyosis which included 14.8% of the cases (74 cases) and leiomyoma with adenomyosis at 13.4% of the cases (67cases).

Table-3 Histopathological diagnosis

HISTOPATHOLOGICAL DIAGNOSIS	NUMBER	PERCENTAGE
Leiomyoma	138	27.6
Atrophic endometrium	108	21.2
Adenomyosis	74	14.8
Leiomyoma andadenomyosis	67	13.4
Ovarian tumors*	17	3.4

Endometrial polyp	7	1.4
Endocervical polyp	4	0.8
Endometrial adenocarcinoma	6	1.2
Endocervical carcinoma	1	0.2
Endometriosis	1	0.2
Leimyosarcoma	1	0.2
Stromal sarcoma	1	0.2
No significant pathology	75	15.4

*Histopathology of the 17 cases of ovarian tumors revealed the following diagnosis as shown in table no 4 below-

Table 4: Types of Ovarian Tumors

S.No	Ovarian tumor	No of cases
1.	Benign serous cystadenoma	5
2	Benign mucinous cystadenoma	4
3	Fibroma	1
4.	Cystadenofibroma	1
5.	Brenner tumour	1
6.	Serous papillary adenocarcinoma	3
7.	Granulosa cell tumour	1
8.	Krukenberg tumour	1
	Total	17

Out of the 262 cases presenting clinically as dysfunctional uterine bleeding (DUB) their histopathology revealed the diagnosis as follows:

Adenomyosis-63 cases(24.04%), both leiomyoma and adenomyosis-67 cases (25.57%),leiomyoma-38cases(14.5%),ovarian tumors-8 cases(3%), endocervical polyp-4 cases (1.52%) ,endometrial carcinoma-6 cases(2.29%). Endocervical carcinoma -1 case (.38%). 75 cases complaining of DUB clinically showed no significant pathology on histopathological examination. All the above cases were included in table 3 hence the increased numbers of cases as compared to clinical indications.

DISCUSSION

This study was conducted to co-relate the clinical indications of hysterectomies with histopathological diagnosis and to analyse the different patterns of various histopathological lesions observed.

The commonest age range in which most case of hysterectomies were done in this study was between 41-50 years (48.4%) followed by 31-40 years (30%), and 51-60 years (11.8%). This is in accordance with a number of studies in India where the commonest age group is similar.[6,7,8,9] In a nepalese study the mean age was 46.3 years.[9]

The commonest presenting symptom in this study was dysfunctional uterine bleeding (DUB)-262 cases (52.4%) complained of dysfunctional uterine bleeding. Similar findings were observed by Shergil SK[4] who reported abnormal menstrual flow as the commonest complaint in 66% cases. This is also in accordance with studies carried out elsewhere.[10,11,12]

In this study the commonest pathology observed was leiomyoma (27.6%) followed by atrophic endometrium (21.2%) of uv prolapse. Sobande AA also found that fibroids were the most common pathology seen in 25% of the hysterectomy specimens.[13] Leiomyoma is the commonest uterine tumour and have been identified as one of the leading causes for hospitalization for gynaecological disorders and hysterectomy in the USA[14]. In another study by Karthikeyan T M et al the commonest pathology was found to be leiomyoma (32%), followed by atrophic endometrium of prolapse uterus (22%)[15]. We have observed similar findings on histopathological examination.

Parveen and Tayyab reviewed 54 elective abdominal hysterectomies and revealed that DUB is a leading indication (27.7%) of hysterectomy and leiomyoma is the commonest (59.2%) pathological lesion[16].

CONCLUSION

Hysterectomy remains a common gynaecological operation in both developed and developing countries. The present study shows various histopathological patterns of lesions in hysterectomy specimens in this region. Leiomyoma was the commonest pathology observed and there was a high correlation with histopathology when the clinical diagnosis was fibroid. Cases diagnosed clinically as UV prolapse were reported as atrophic endometrium and all cases were correlated. Histopathology is mandatory for diagnosis and subsequent management.

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