Original Article

Determine the Importance of Pathological Lesion in the Hysterectomy Treated Patients

Saima Gulzar[1], Samra Ismat[2] and Nazia Sajjad[3]

ABSTRACT

Objective: To evaluate the histopathological characteristics of the assorted uterine lesions in the hysterectomy treated patients.

Study Design: Observational / cross-sectional

Place and Duration of Study: This study was conducted at the Department of Pathology, Services Hospital, Lahore from January 2018 to June 2018.

Materials and Methods: One hundred and thirty three patients of hysterectomy cases having ages from 30 to 65 years were included. All patients were referred to pathology department for diagnosis. Patient's detailed history was examined with their previous records. Pathological results in the uterus, cervix and ovaries were examined.

Results: There were 28 (21.05%) patients ages between 31 to 40 years, 70 (52.63%) patients ages between 41 to 50 years, 22 (16.54%) patients had an ages of 51 to 60 years while rest 13 (9.77%) were ages greater than 60 years. Histopathology findings were noted as leiomyoma in 60 (45.11%) cases, adenomyosis was observed in 14 (10.53%) cases, endometrial adenocarcinoma was resulted in 2 (1.50%) cases.

Conclusion: It is concluded from this study that adenomyosis, leiomyomya and adenocarcinoma were the most frequent histopathological lesions in patients treated hysterectomy.

Key Words: Hysterectomy, Histopathology, Causes, Lesion

Citation of article: Gulzar S, Ismat S, Sajjad N. Determine the Importance of Pathological Lesion in the Hysterectomy Treated Patients. Med Forum 2019;30(12):59-61.

INTRODUCTION

Uterus is a important reproductive organ that evolve many malignant and benign disorders during life time in women, mostly observed in women whom ages greater than thirty years.[1] The uterus comprise of endometerium and myometerium which is under the effects of different hormones. Worldwide hysterectomy is the most commonly performed surgical treatment in pre-menopausal and post menopausal women.[2] In USA, hysterectomy is the second most common surgical treatment.[3]

The cervix causes several malignant diseases such as dysfunctional uterine bleeding (DUB), fibiroids, utero-vaginal prolapsed (UVP), endometrium carcinoma, adenimyosis, pelvic pain, gynaecological cancer and many other complications.[4]

[1.] Department of Histopathology, Services Hospital Lahore.
[2.] Department of Obstet and Gynae, M. Islam Medical & Dental College Gujranwala.
[3.] Department of Obstet and Gynae, Niazi Medical & Dental College Sargodha.

Correspondence: Dr. Saima Gulzar, Demonstrator of Histopathology, Services Hospital, Lahore.
Contact No: 0331-7679271
Email: saimadilawar@outlook.com

Received: June, 2019
Accepted: September, 2019
Printed: December, 2019

It construct complete uterus and consequently controlled over tissue sampling and therefore empowering determination of the origin of a specific lesion.[5] The most common complication followed by cervix are excessive vaginal bleeding, vaginal discharge, abdomen pain, irregular menustration, post-menopausal bleeding.[6]

Many treatment procedures are performing for this malignant disease but the hysterectomy is the most preferred surgical treatment to treat the gynaecological diseases. Histopathology is the most important for diagnosing this malignant disease. Diagnoses of adenomyosis is only depends on histopathology while dysfunctional uterine bleeding is a diagnosis of exclusion. In the USA the life time risk of hysterectomy is 25% and in Denmark it is 10.5%.[7] Via abdominal route 60-80% of hysterectomies are performed in USA and UK.[8]

This study was conducted to evaluate the histopathological characteristics of the assorted uterine lesions in the hysterectomy treated patients/samples and correlate the clinical observation.

MATERIALS AND METHODS

This observational cross-sectional study was conducted at Department of Pathology, Services Hospital Lahore from 1st January 2018 to 30th June 2018. In this study, we included 133 patients who underwent hysterectomies having ages from 30 to 65 years. All

patients were referred to pathology department for diagnosis. After taking informed consent from the patients, detailed history was examined with their previous records. Specimens with incomplete requisition form and those having other gynaecological complications were excluded from this research. Pathological results in the uterus, cervix and ovaries were examined. The samples were taken and properly labeled and fixed in 10% buffered formalin. After complete and proper examination through microscope, results were noted as a histopathological finding. All the data was entered and analyzed by SPSS 17.0.

RESULTS

There were 28 (21.05%) patients were ages between 31 to 40 years, 70 (52.63%) patients were ages between 41 to 50 years, 22 (16.54%) patients had an ages of 51 to 60 years while rest 13 (9.77%) were ages greater than 60 years (Table 1). Histopathology findings were noted as leiomyoma in 75 (56.39%) cases, adenomyosis was observed in 20 (15.03%) cases, endometrial adeno CRC was resulted in 2 (1.50%) cases, cervix chronic cervicitis was resulted in 5 (3.76%) patients, the most frequent pathology observed in the ovary was endometriosis and it was in 7 (5.26%) patients followed by mature cystic teratoma in 5 (3.76%) cases, serous cystedenoma found in 2 (1.50%) cases, mucinous cystedenoma observed in 5 (3.76%) cases, serous cystedenocarcinoma found in 4 (3.01%) cases, krukenberg tumor and immature taritoma was observed in 2 (1.50%) cases (Table 2).

Table No.1: Age wise distribution of patients (n=133)

Age (years)	No.	%
31-40	28	21.05
41-50	70	52.63
51-60	22	16.54
>60	13	9.77

Table No.2: Histopathological findings of all the patients

Finding	**No.**	**%**
Leiomyoma	75	56.39
Adenomyosis	20	15.03
Adenocarcinoma	2	1.50
Chronic cervicitis	5	3.76
Endometriosis	7	5.26
Mature cystic teratoma	5	3.76
Serous Cystedenoma	2	1.50
Mucinous cystedenoma	5	3.76
Serous cystedeno carcinoma	4	3.01
Immature taritoma	2	1.50

DISCUSSION

Hysterectomy is the most frequent surgical treatment performed in gynaecology setting.[2] Hystrectomy performed due to multiple causes in which the most common was rupture of uretus. It includes life saving procedure during delivery. Also it may causes the abnormal uterine bleeding. Clinico-pathological observation is very important for the surgical treatment. This study was conducted to evaluate the histopathological characteristics of the assorted uterine lesions in the hysterectomy treated patients/samples and correlate the clinical observation.

In this research, we observed most of the patients (52.63%) had an ages of 41 to 50 years. These results were same to the other study conducted by Harshal A. et al[9] in which mostly patients were having ages of 41 to 50 years, several researches regarding this malignant disorder showed similar results.[10-12] In our study the most common method for hysterectomy was abdominal hysterectomy 100 (75.19%) and vaginal hysterectomy was performed on 33 (24.81%) patients, these results shows that abdominal hysterectomy procedure ratio was higher than the vaginal hysterectomy procedure. These results shows similarity to the other study in which abdominal hysterectomy ratio was high than the vaginal procedure such as 69.6% and 30.4% respectively.[6]

In this study, we observed leiomyoma was the most common lesion (56.39%) and it was same to the other studies.[13-14] Adenomyosis is the second most common findings based on histopathology (15.03%) was observed in this study and patients ages between 41 to 50 years and these results shows similarity to the study conducted by Rizvi et al.[15]

In our research we found chronic cervicitis in 5 (3.76%) cases and these results shows similarity to the other study.[14] We found the most frequent pathology observed in the ovary was endometriosis and it was in 7 (5.26%), these findings were similar to the some other studies conducted regarding histopathology lesion in hysterectomy specimens.[15-18] Patients followed by mature cystic teratoma in 5 (3.76%) cases, serous cystedenoma found in 2 (1.50%) cases, mucinous cystedenoma observed in 5 (3.76%) cases.

We observed that serous cystedenocarcinoma found in 4 (3.01%) cases, krukenberg tumor and immature taritoma was observed in 2 (1.50%) cases and these results were same to the other studies.[19-20]

CONCLUSION

The current research provides a fair insight into the histological patterns of lesion in hysterectomy specimens in our settings. Though the histopathological analysis correlate good with the clinical diagnosis. Quite a few lesions are also encountered as pure incidental observations. Moreover, it is very important that every hysterectomy specimens should be subjected

to detailed histopathological examination. We found adenomyosis, leiomyomya and adenocarcinoma were the most frequent pathological findings and which may be the causes of abnormal uterine bleeding.

Author's Contribution:

Concept & Design of Study:	Saima Gulzar
Drafting:	Samra Ismat
Data Analysis:	Nazia Sajjad
Revisiting Critically:	Saima Gulzar, Samra Ismat
Final Approval of version:	Saima Gulzar

Conflict of Interest: The study has no conflict of interest to declare by any author.

REFERENCES

1. Clayton RD. Hysterectomy. Best practice and research. Clin Obstet Gynecol 2006;20(1):73-87.
2. Forae GD, Aligbe JU. Histopathological Patteren of endometrial lesion in patients with abnormal uterine bleeding in o cosmopolitan population. J Basic Clin Reprod Sci 2013; 2:101-4.
3. Saravanan S, Amold J, Arul P. Histomorphological spectrum of lesion of the cervix. a retrospective study. JEMDS 2015;4:10326-9.
4. Munro MG, Critcheley HO, Broder MS, Fraser IS. FIGO Working group on menstrual Disorder. FIGO Classification System (PALM COEIN) for causes of abdominal uterine bleeding in non gravid women of reproductive age. Int J Gynecol Obstet 2011;113(1):3-13.
5. Nausheen F, Iqbal J, Bhatti FA, Khan AT, Sheikh S. Hystrectomy: the patients perspective. Ann Gynecol 2004;10(4):339-41.
6. Thompson JD. Hysterectomy. In: Thompson JD. Rock JA, editors. Te Linde's Operative Gynecol. 7th ed. Philadelphia JB Lipnncott Company; 1992.p. 663-738.
7. Jacobson GF, Shaber RE, Armstrong MA, Yi Hung Y. Hystrectomy Rates for benign indications. Obstet Gynecol 2006;107:1278-83.
8. Farquhar CM, Steiner CA. Hytrectomy rates in the USA. Obstet Gynecol 2014; .99(2):229-34.
9. Patil HA, Patil A, Mahajan SV. Histopathological findings in uterus and cervix of hysterectomy specimens. Med Sci 2015;2:26-29.
10. Rather GR, Gupta Y, Bhardwaj S, Patterns of lesions in hysterectomy specimen: a prospective study. J K Sci 2013;15;63-8.
11. Ramchandran TS, Sinha R, Subramanium. Correlation between clinic pathological and ultrasonographic findings. J Clin Diag Res 2011; 5:734-40.
12. Gon S, Basu A, Das TK, Sengupta M, Ghosh D. Spectrum of histopathological lesions in the fallopians tube. J Pathol Nepal 2013;3:356-60.
13. Gangadharan V, Prasanthi C; Hystrectomy; A clinicopathological correlation. IJBAMR: 2016; 8-15.
14. Kishwar Naheed, Abid Hussain , Riasat Ali. Clinico-Pathological Study of Hysterectomy: JIIMC 2018;13(2).
15. Rizvi G, Pandey H, Pant H, Chuffal SS, Pant P. Histopathological correlation of edenomyosis and lei myoma in hysterectomy specimens as the cause of abnormal uterine bleeding in women in different age groups. J Mid Life-Health 2013;4;27-30.
16. Bukhari U, Sadiq S. Analysis of the underlying pathological lesions in hysterectomy specimens. Pak J Pathol 2007; 18(4):110-2.
17. Ali A. Incidence of adenomyosis in hysterectomies. Pak J Med Res 2005;44:38-40.
18. Talukder SI, Haque MA, Huq MH, et al. Histopathological analysis of hysterectomy specimens. Mymensingh Med J 2007; 16(1);81-4.
19. Verma D, Singh P. Analysis of Histopathologcal examination of the hysterectomy specimens. Int J Res Mecd 2016; 4(3):4753-8.
20. Sinhsane H, Nishty GM. A Study on clinicopathological analysis of hysterectomies. International J Reprod Contracept Obstet Gynaecol 2017;6 466-9.