



ORIGINAL RESEARCH PAPER

Pathology

HISTOPATHOLOGICAL STUDY OF HYSTERECTOMY SPECIMENS IN PATIENTS PRESENTING WITH MENORRHAGIA- A TERTIARY CARE HOSPITAL EXPERIENCE

KEY WORDS: Hysterectomy, Menorrhagia, Leiomyoma

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ABSTRACT

Background: Menorrhagia is very distressing health problem in women that impairs the quality of life of many otherwise healthy women. Menorrhagia refers to excessive or prolonged menstrual bleeding occurring at regular intervals. Hysterectomy is a traditional surgical treatment for menorrhagia and is still the most frequently performed major gynaecological operation.

Aims and Objectives To determine the types and frequencies of uterine lesions in patients presenting with menorrhagia in different age groups.

Materials and Methods This is a prospective study conducted in the department of Pathology, CAIMS, Karimnagar over a period of 1 year i.e from January 2017 to December 2017. 100 hysterectomy specimens were taken which were performed for the treatment of menorrhagia. Patient's brief clinical data was retrieved with respect to age, parity, clinical manifestations, sonographic findings were recorded. Histopathological examination was done and diagnoses were recorded.

Results: Uterine leiomyoma is the most common benign condition found in hysterectomy specimens with peak incidence at 36-45 years.

Conclusion: Histopathology is mandatory for confirming the diagnosis and ensuring optimal management

Introduction:

Endometrium is a dynamic, hormonally sensitive and responsive tissue which constantly and rhythmically undergoes changes in the active reproductive life⁽¹⁾. Menorrhagia refers to excessive or prolonged menstrual bleeding occurring at regular intervals⁽²⁾. It is objectively defined as blood loss >80 ml /or menstrual period lasting longer than 7 days⁽³⁾. Menorrhagia is very distressing health problem in women and it proves to be the major drain of gynaecological resources. The causes of menorrhagia may be local, systemic and dysfunctional. Local causes are benign lesions such as leiomyoma, adenomyosis etc., rarely malignant entities like endometrial carcinoma, endometrial stromal tumor, secondaries in endometrium may present with menorrhagia⁽⁴⁾. Systemic diseases such as hypothyroidism, liver disease, cirrhosis, chronic renal failure, chronic endometritis and usage of intrauterine devices are also associated with menorrhagia⁽⁵⁾.

Many treatment options are available nowadays including medical and conservative surgical procedures but hysterectomy remains the most preferred method to manage gynaecological disorders⁽⁶⁾. Hysterectomy can be done by the vaginal or abdominal route or with laparoscopic assistance⁽⁷⁾. This helps in adequate sampling of the required and suspected areas and thus helps in the diagnosis of various lesions without any error of sampling.

In this study, we have attempted to analyse different histological patterns of endometrium and organic lesions in hysterectomy specimens in case of menorrhagia.

Material and Methods:

This is a prospective study. This study was conducted in the Department of Pathology, Chalmeda Anand Rao Institute of Medical Sciences, Karimnagar over a period of 1 year. The patients presenting to the department of gynaecology with the complaint of menorrhagia were evaluated and hysterectomy was done. 100 hysterectomy specimens were taken which were performed for the treatment of menorrhagia in the department of Pathology. Patients with menorrhagia in the age group of 25-55yrs were selected after taking detailed history. Patient's brief clinical data was retrieved with respect to age, parity, clinical manifestations, sonographic findings. Sections were taken from cervix, endometrium and myometrium. Polyps were entirely submitted or sectioned and half submitted if large. Formalin fixed and paraffin embedded tissue sections were cut and haematoxylin and eosin

staining was done. The lesions were categorised according to histopathological findings.

Inclusion criteria were patients coming to the outpatient department with complaint of menorrhagia for which hysterectomy was performed.

An exclusion criterion was hysterectomies done for complaints other than menorrhagia.

RESULTS:

A total of 100 abdominal hysterectomy specimens were included in the study. The age range of patients was 25-55 years. In our study, it was observed that maximum number of cases were in the 35-45 year age group. Out of 100 cases, the most common cause of menorrhagia was uterine leiomyoma.

Table 1: Age wise distribution of patients with menorrhagia

Age in years	No. of cases	Percentage
25-35	18	18
36-45	56	56
46-55	26	26

Table 2: Frequency of histological pattern in menorrhagia

Hist Histopathologic diagnosis	No. of cases	Percentage
Lei Leiomyoma	44	44
Hor Hormonal imbalance	16	16
Aad Adenomyosis	10	10
Endometrial hyperplasia	10	10
Endometrial polyp	06	6
Leiomyoma with hyperplasia	05	5
Adenomyoma	04	4
HSIL	03	3
Endometrial carcinoma	02	2

DISCUSSION:

Menorrhagia is primarily a subjective complaint perceived by women as heaviness of their period⁽⁸⁾.

Hysterectomy is the most common and successful procedure carried out in terms of symptom relief, patient satisfaction, and definitive cure in many diseases.

In our study, most of the patients with menorrhagia were in the age group of 36-45 years which was similar to the study by Mackenzie and study by Shaheen et al, who reported that most of the patients with menorrhagia were above the age of 40 years⁹.

In the present study, most common histopathological pattern in menorrhagia is leiomyoma followed by adenomyosis and hormonal imbalance. Most of the studies done on hysterectomy specimens showed leiomyomas as the most common pathological lesion with a variable frequency^{9,10}. 10% of cases showed endometrial hyperplasia and 6% of cases showed endometrial polyp.

Malignant tumors of endometrium were very rare compared to benign lesions. We encountered 2 cases of endometrial carcinoma in premenopausal patients, which is similar to study done by sajjad et al¹⁰. we also reported a case of high grade squamous intraepithelial lesion

CONCLUSIONS:

Uterine leiomyoma is the most common benign condition found in hysterectomy specimens with peak incidence at 36-45 years.

Histopathology is mandatory for confirming the diagnosis and ensuring optimal management

Conflicts of interest: Nil

Financial support: Nil

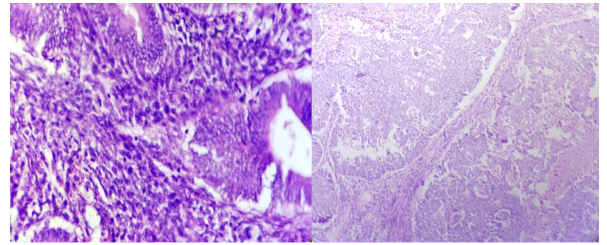


Fig 7: Simple endometrial hyperplasia without atypia

Fig 8:Endometrial carcinoma

References:

1. Zeeba S, Jairajpuri, S.Rama, S.Jetly. Atypical uterine bleeding: histopathological audit of endometrium. A study of 638 cases. Al Ameen J Med Sci.2013; 6(1):21-28.
2. Shah Sarfraz T, Tariq H. Histopathological findings in menorrhagia: A study of 100 hysterectomy specimens. Pak J Pathol 2005;16(3):83-85.
3. Cameron IT. Menstrual disorder. In: Edmond DK. Dewhurst's Text book of Obstetrics and Gynaecology for postgraduates. 6th ed. London: Blackwell Science Press Limited; 1999. 410-419.
4. Ayesha Sarwar, Anwar Haque. Types and frequencies of pathologies in endometrial curettings of abnormal uterine bleeding.2005;3(2):65-70.
5. Dij Khuizen FP, Mol BW, Brolmann HA, Heintz AP. The accuracy of endometrial sampling in the diagnosis of patients with endometrial carcinoma and hyperplasia; A meta analysis. Cancer.2000; 89:1765-72.
6. Qamar-Ur-Nisa. Habibullah.Shaiikh TA, Hemlet, Memon F, Memon Z. Hysterectomies; An audit at a tertiary care hospital.Professional Med J.2011. March; 18(1):46-50.
7. Silverberg SG, Dehellis RA, Frable WJ, Li Volsi VA, Wick MR. Silverberg's principles and practice of surgical pathology and cytopathology. 4th ed. Edinberg: Elsevier; 2006.vol 2.1935.
8. Cote I, Jacobs P, Cumming DC. Use of health services associated with increased menstrual loss in the United States. Am J Obstet Gynecol.2003;188:343-8.
9. MacKenzie IZ, Bibby JG. Critical assessment of dilatation and curettage in 1029 women. Lancet.
10. Sajjad M, Iltaf S, Qayyum S. Pathological findings in hysterectomy specimens of patients presenting with menorrhagia in different age groups. Ann Pak Inst Med Sci 2011;7:160-2.



Fig 1: Gross pic of submucosal leiomyoma

Fig 2: Trabeculations in myometrium

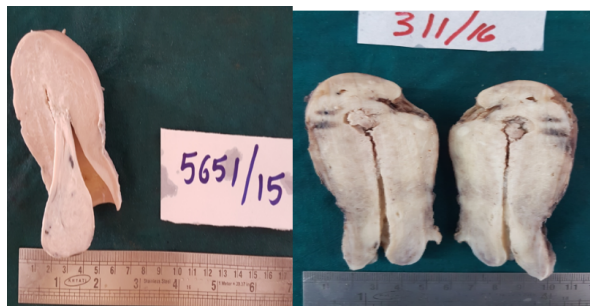


Fig 3:Gross pic of endometrial polyp

fig 4: Gross pic of endometrial carcinoma

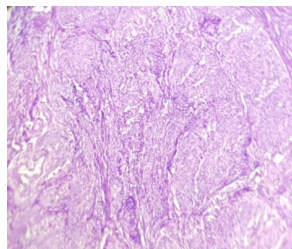


Fig 5: Microscopic pic of leiomyoma, H&E

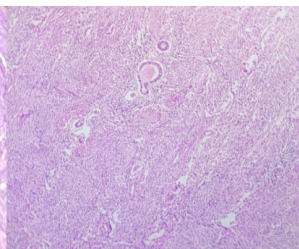


Fig 6: Adenomyosis , H&E, X100