



STUDY OF HISTOPATHOLOGICAL LESION OF ENDOMETRIAL BIOPSY IN WOMEN PRESENTING WITH ABNORMAL UTERINE BLEEDING: A RETROSPECTIVE STUDY

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ABSTRACT

Introduction: - Abnormal uterine bleeding is a common symptom of the patients in all age group. AUB is caused by a wide variety of causes in different age. Histopathological examination of endometrial biopsy is a major diagnostic tool in evaluation of AUB.

Aim:- To study the endometrial lesion in all age group presenting with AUB.

Methodology:- A retrospective study was designed to study of various D& C and endometrial biopsies sent for histopathological examination at department of pathology, Shyam Shah Medical College, Rewa, M.P. from 1st January 2019 to 30th June 2019. The study is based on the histopathological evaluation of endometrial biopsies received during the 6 month of study period.

Result: - Total 87 specimen of endometrial biopsies were collected in 6 month of study period, of which 5 cases excluded from study due to inadequate sampling and 82 cases were analyzed. We found that all age group was presented with AUB but women with age group 36-50 years were more common. 53.7% cases were the organic cause and in which endometrial hyperplasia was most common. 46.3% cases were the functional causes in which proliferative phase was most common. 2 cases of endometrial carcinoma found.

Conclusion: - Histopathological evaluation of endometrial samples can be used as first step for diagnosis of abnormal uterine bleeding.

KEYWORDS : endometrial biopsy, functional, organic.

INTRODUCTION-

Endometrial diseases are prevalent across all age group and to a great extent are a leading cause of increases mortality and morbidity. The majority of females with endometrial diseases present with abnormal uterine bleeding (AUB). (1,2) Abnormal Uterine bleeding (AUB) is defined as any departure from normal menstruation or from a normal menstrual cycle pattern. (3) Bleeding is considered abnormal when the pattern is irregular, abnormal duration, or menorrhagia or abnormal amount. (4) Causes include functional causes like normal cyclical endometrium abnormal physiological changes of endometrium (atrophic endometrium, weakly proliferative endometrium, disordered proliferative) and organic lesions like chronic endometritis, hyperplasia, polyp, carcinomas and pregnancy related complications. Histopathological examination of endometrial biopsy is a major diagnostic tool in evaluation of abnormal uterine bleeding. (5) The underlying disease can be detected by histological variations of endometrium taking into account the age of woman, the phase of her menstrual cycle and use of exogenous hormones. The aim of the study was to analyze the histomorphological patterns of endometrium in various age group of patients presenting with AUB and their frequencies.

MATERIAL & METHOD-

The study conducted in the histopathological section of department of pathology, SSMC, SGMH/GMH, Rewa, MP. Specimen of Endometrial tissue received in the duration of 6 month from January 2019 to June 2019 were included in the study. A total of 87 Specimen were received in 10% buffered neutral formalin and were subjected to routine histopathological processing. Section of 5 micron thickness were taken and stained with H& E stain. The final diagnosis was given after detailed study of these sections under the light microscope. Specimens where there is no endometrial tissue

or no only minimal stromal elements or couldn't be concluded, in spite of the presence of some tissue, a diagnosis of inadequate for evaluation were given.

RESULTS-

The present study received 87 endometrial biopsy during 6 month of study period, of which 5 excluded from study due to inadequate sampling. The patient age ranges from 20 years to 60 years. Maximum cases were in the age group of 31-50 accounting for 86.5% of total cases.

Table 1:- Cases in different age groups:

Age group	No. of Patients	% of Patients
20-30 yrs	06	7.31%
31-40 yrs	33	40.24%
41-50 yrs	38	46.34%
51-60 yrs	05	6.09%
Total	82	100%

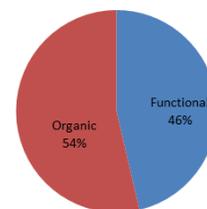


Fig.1 Diagram showing the distribution of causes

Table 2:- Organic lesions of Abnormal Uterine bleeding

Causes	No. of Cases	% of Cases
Retained product of conception	06	13.6%
H. mole	01	2.27%

Endometrial Polyp	07	15.9%
Leiomyoma	06	13.6%
Chronic Endometritis	04	9.1%
Endometrial hyperplasia without atypia	16	36.4%
Endometrial hyperplasia without atypia	02	4.5%
Endometrial Carcinoma	02	4.5%
Total	44	100%

Table 3:-Functional Causes of Abnormal Uterine bleeding

Causes	No. of cases	% of Cases
Proliferative phase	21	55.3%
Secretory phase	06	15.8%
Proliferative Anovulatory phase	04	10.5%
Disordered Proliferative endometrium	03	7.9%
Hormonal changes/Decidualization	04	10.5%
Total	38	100%

Table 4:- Distribution of Study subjects (n=82) according to histological diagnosis in different age group

Histopathological diagnosis	20-30yrs	31-40yrs	41-50yrs	51-60yrs
RPOCs	5(83.3%)	1		
H.Mole	1(16.6%)			
Endo. Polyp		5	2	
Leiomyoma		2	4	
Chronic endometritis		1	2	1
EH without atypia		5	9(23.6%)	3
EH with atypia			1	1
Endo. Carcroma			2	
Proliferative Phase		9(27.27%)	12(34.2%)	
Secretory Phase		4	2	
Anovulatory Phase		2	2	
Disordered proliferative endometrium		2	1	
Hormonal changes/pseudodecidualization		2	3	
Total	6	33	38	5

DISCUSSION-

The present study shows that maximum number of cases were from 41-50 age group (46.3%) which is comparable with the different study.

Study	Elavarasan. T et al study(6)	Rajgopal I et al study(7)	Bhatta S et al study(8)	Present study
Cases	111(48.7%)	81(48.5%)	48(39.3%)	57(46.3%)

In the Present Study, most common histopathological findings was proliferative endometrium(25.6%) followed by endometrial hyperplasia without atypia(19.5%) which was comparable with the **Bhatta S et al(8)** study in which 26.23% was proliferative endometrium and 18.03% was endometrial hyperplasia without atypia. Proliferative endometrium as a leading cause of AUB also seen in **Deka R.R.et al(9)** study(24.2%), **Salvi A et al(10)** study(37.2%), **Khare et al(11)**study(26.8%). In our study most common organic cause of AUB was due to endometrial hyperplasia (40.9%),which is consistent with other studies conducted by **Anwar M et al(12)** Study (62.8%) and **Mirza T et al(13)** study(30%). In reproductive age group, pregnancy related complications were the most common finding below 30 years of age and in 31-40 yrs of age cyclical endometrial change was predominant finding which is comparable to the study **Deka**

RR et al(9). In perimenopausal age,proliferative endometrium(32%) was the major cause which is comparable to the findings in **Deka R R et al(9)** study(35.6%), **Salvi et al (10)** study (53%), **Bhatta S et al(8)** study(29.8%.

Table 5:-Comparison of Causes of AUB with different study

Study/ Causes	EH	PP	SP	RPOC	Endo. Carcinoma
Deka R.R. et al study(9)	15 (11.3%)	32 (24.2%)	16 (12.1%)	25 (18.9%)	01 (0.75%)
Chhatrasal et al study(14)	395 (25.5%)	117 (7.6%)	372 (24.1%)	-	28 (1.8%)
Rajgopal I et al study(7)	38 (22.6%)	15 (8.9%)	40 (23.9%)	6(3.5%)	3 (1.7%)
Bhatta S et al study(8)	22 (18.03%)	32 (26.23%)	20 (16.39%)	-	7 (5.74%)
Present Study	18 (21.9%)	21 (25.6%)	06 (7.3%)	06 (7.35%)	02 (2.4%)

CONCLUSION-

Endometrial causes of AUB are age related pathology. Histopathological examination of Endometrium is the gold standard to evaluate AUB.Accurate analysis of endometrial sampling is the key to effective therapy. Thus Histopathological evaluation of endometrium is, especially, indicated in women over the age of 35 years presenting with AUB to rule out preneoplastic lesions and malignancies.

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