# Clinico-Pathological Co-relation in Diagnosis and Management of Abnormal Uterine Bleeding

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## **ABSTRACT**

Abnormal uterine bleeding is the third most common clinical presentation in gynecology OPD. Histopathological evaluation of the endometrial tissue plays a significant role in diagnosis and management of Abnormal Uterine Bleeding. Aim: To find out cause of abnormal uterine bleeding with the help of histopathological report of endometrial biopsy. Methodology: This is retrospective observational study done at NGMC from (1st June 2018 to -30th June 2019) of 100 patients endometrial biopsy sent for histopathological evaluation and diagnosis reports were correlated with age and bleeding pattern and patients were managed accordingly. Result: A total of 100 endometrial specimens submitted with clinical diagnosis of Abnormal Uterine Bleeding were studied. Patients age group ranged from 18 – 65 yrs and most of them were seen in the age group of 41–50 yrs (43%). The commonest complaint was menorrhagia i.e. 48%. The commonest endometrial pattern observed in the study was, proliferative phase endometrium (38%). Conclusion: Endometrial biopsy is one of the most useful diagnostic tools to find out cause of uterine bleeding in AUB cases and also helps in management of AUB patient.

# Key words: Abnormal uterine bleeding, Endometrium, Endometrial biopsy, Histopathology, Menorraghia

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# **INTRODUCTION**

Abnormal uterine bleeding (AUB), it's a bleeding from the female genital that deviates from normal menstrual bleeding in frequency duration and amount, it is prolonged in duration and excessive in amount . This is due to hormonal imbalance, malignancy, uterine organic pathology and pregnancy related complications in reproductive age group. The Common presentations are menorrhagia, polymenorrhoea, metrorrhagia, and inter-menstrual bleeding. Endometrial biopsy is OPD based diagnostic tool in diagnosis and management of abnormal uterine bleeding. Gold standard is hysteroscopy guided biopsy but endometrial biopsy is quick, OPD based procedure needs no anesthesia. Hence, endometrial biopsy should be recommended in patient with AUB of peri-menopausal age group to exclude organic pathology of endometrium to plan appropriate management. The HPE of endometrial biopsy is considered as alternative tool to hysteroscopy guided endometrial biopsy for diagnosis of etiology of AUB and plays a significant role in early diagnosis and management of AUB.

# **METHODOLOGY**

This is retrospective observational study carried out at NGMC. Data were collected from (1st June 2018 - 30th June 2019) of 100 patients who underwent OPD based endometrial biopsy

by standard technique, tissue had been sent to the pathology department NGMCTH kohalpur for evaluation. Data were collected from gynecology OPD and pathology department, with the consent from hospital director. The final report was carried out from histopathological resister of pathology department. The data were recorded in standard porforma and analyzed by using version 17 of SPSS.

#### **AIMS AND OBJECTIVES**

 To find out the cause of AUB with the help of endometrial biopsy report.

# **INCLUSION CRITERIA**

Women presenting with Abnormal Uterine Bleeding.

#### **RESULT**

Age group	Frequency	Percentage (%)		
<20yrs	3	3		
21-30yrs	14	14		
31-40yrs	30	30		
41-50yrs	43	43		
>50yrs	10	10		
Total	100	100		

Table I: Distribution of patients according to the age group

The above table shows, maximum number of patients were of 41-50 years (43%), least number of patients were under age group <20 years (3%), mean was 3.43 and standard deviation was (0.95%). (Table I)

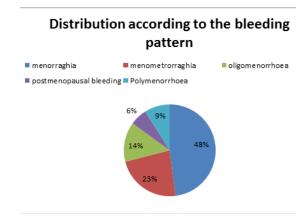


Figure 1: Distribution of patients according to the bleeding pattern

Menorraghia is common bleeding pattern i.e. (48%) followed by menometorraghia (23%) in patient who presented with abnormal uterine bleeding in present study shown in (Figure 1).

Age group (yrs)	Histopathological findings among various age group							
	Disordered proliferative phase endometrium	Endometrial carcinoma	Proliferative phase endometrium	Secretory phase endometrium	Pregnancy and related complication	Endo-metrial hyper-plasia without atypia	Endo-metrial hyper-plasia with atypia	P value
<20	0	0	0	0	3	0	0	
21-30	1	0	2	3	8	0	0	
31-40	2	0	10	12	4	2	0	0.001
41-50	6	0	22	7	0	6	2	
>50	0	2	4	1	0	2	1	
Total	9	2	38	23	15	10	3	

Table II: Distribution of patients in relation to age group with histopathological findings

The secretoy phase endometrium was common histopathological finding in patients of abnormal uterine bleeding of age group (31-40yrs) i.e. in 12 patients out of 35. The proliferative phase endometrium was common histopathological finding in age group (41-50yrs) i.e. in 22 patients out of 43. Pregnancy and related complication were seen in reproductive age group maximum number in age group (21-30 yrs) i.e. in 8 patients out of 14. Which is statistically significant p Value is 0.001. (Table II)

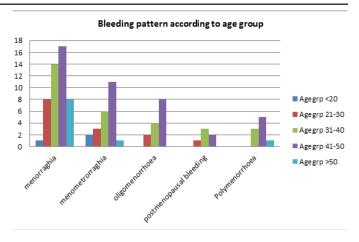


Figure 2: Distribution of patient according to bleeding pattern in relation to age group

Menorrhagia was most common complaint in study population, out of 43 patients in age group (41-50yrs) 17 patients had menorrhagia followed by menometrorraghia. Similarly in age group (31-40yrs) out of 30 (14 patients) had menorrhagia and out of 10(8 patients) in age group (>50yrs) had menorrhagia. (Figure 2)

## **DISCUSSION**

Endometrium biopsy is the most useful tool for diagnosis management of Abnormal Uterine Bleeding. In this study the highest incidence of Abnormal Uterine Bleeding was noted in 41 – 50 yrs age group (43%) followed by 31-40 yrs age group (30%) and the mean age was 45yrs which is similar to study done by Jagadale K1. AUB is common in perimenopausal age group i.e. (41-50 yrs) similar finding was observed in study conducted by Padhye A<sup>3</sup>, Vaidya S<sup>6</sup>, Saraswathi D9 Mahapatra M Mishra  $P^{11}$ , Banale M14 and Singh  $P^{12}$  . The most common endometrial pattern in perimenopausal age group was proliferative (38%), followed by Secretory (23%). Similar study proliferative 47.3% and Secretary 16.1% in study done by Gopalan G5. According to Vaidya S6 secretory and proliferative endometrium is common in perimenopausal age group which is similar to this study. The incidence of disordered proliferative endometrium is 15% in this study which is guite similar with study done by Das B<sup>13</sup>. In the study done by Saraswathi D<sup>9</sup> et al. the common pathology corresponding of age group was disordered proliferative endometrium but in present study proliferative endometrium is common followed by secretory endometrium. According to Suneet K<sup>7</sup> proliferative endometrium is commom histopathological finding in AUB followed by secretory endometrium. The incidence of AUB is more in perimenopausal age group then in postmenopausal age group which is similar to our study. Menorraghia is common clinical finding in cases of AUB about 48% patient presented with menorraghia in our study which is similar to the study done by Jagadale K<sup>1</sup> in (88%) cases, Tiwari A<sup>4</sup> (60%) cases, Banale M<sup>14</sup>, Mahapatra M Mishra P1(49.1%) cases and Khan R8(55.8%) cases. According to Azim P<sup>2</sup> the polymenorrhoea (35%) was common clinical feature in patient with AUB. The risk of endometrial carcinoma is

increasing with age it is more common in perimenopausal and postmenopausal age group in our study incidence is 2% which is similar to the study conducted by Singh  $P^{12}$  i.e (2.6%), Vaidya  $S^6$  (2.4%) , Padhye  $A^3$  (2.9%) and the incidence of endometrial carcinoma is quite high i.e. (5%) in the conducted by Mirza  $T^{10}$  . In our study incidence of pregnancy and related complication was 18% which is similar to Jagadale K1 i.e. 15 % but in study done by Tiwari  $A^4$  it is only 6% which is only 1/3rd of our study result.

#### CONCLUSION

Endometrial biopsy is indicated in women over the age of 35 yrs with abnormal uterine bleeding to rule out premalignancy and malignancy related conditions. Timely evaluation of Abnormal Uterine Bleeding by endometrial biopsy helps in diagnosis and management and can be life saving tool.

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