

Clinical Bleeding and Histopathology Pattern of Abnormal Uterine Bleeding

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Abstract

Background: Abnormal uterine bleeding (AUB) is bleeding from the uterus which is more than the usual or which occurs for a longer period than normal or which occurs at an irregular time. AUB can occur in all age groups with different modes of presentation and is also one of the important symptom or presenting complaint where in people tend to see their doctors. There are wide range of causes which include fibromyoma, adenomyosis, endometrial polyp, ovarian tumor, pelvic inflammatory disease (PID), endometrial hyperplasia, endometrial carcinoma, hormonal imbalance (like hypothyroidism) or hypothalamic pituitary diseases.

Methods: This prospective observational study was conducted by the department of OBG at Narayana medical college, Nellore, Andhra Pradesh from December 2019 to May 2020. A total of 102 patients were included in the study on the basis of inclusion criteria.

Results: The maximum cases 52 (50.1%) were in the age of 41-50yrs followed by 30(29.4%) in the age group 31-40 years. The mean age of the patients was 44.87(SD9.67) years. The most common mode of presentation was heavy menstrual bleeding seen in 55 cases (53.9%) followed by prolonged menstrual bleeding in 22 cases (21.6%). Proliferative endometrium was found in 44 (43.1%) cases followed by secretory endometrium in 36 (35.3%) cases and endometrial hyperplasia in 15 (14.7%) cases.

Keywords: Abnormal uterine bleeding; Histopathology; Dysfunctional uterine bleeding.

Introduction

Abnormal uterine bleeding (AUB) is bleeding from the uterus which is more than the usual or which occurs for a longer period than normal or which occurs at an irregular time. AUB can occur in all age groups with different modes of presentation and is also one of the important symptom or presenting complaint where in people tend to see their doctors. There are wide range of causes which include fibromyoma, adenomyosis, endometrial polyp, ovarian tumor, pelvic inflammatory disease (PID), endometrial hyperplasia, endometrial carcinoma, hormonal imbalance (like hypothyroidism) or hypothalamic pituitary diseases. Endometrial diseases are ranked amongst the most common gynaecological disorders, affecting women worldwide.¹ Bleeding pattern in AUB may vary from mild to moderate to severe which may hinder the social and emotional quality of life. The symptoms may be relatively minor which may be self-limiting to conditions requiring hysterectomy. A thorough history, thorough clinical examination and investigations and most importantly the histopathological examination are required to reach the diagnosis. Histopathological examination plays an important role in the diagnosis. Hence this study is carried out to analyze the commonest presentation and different histopathological patterns of endometrium in cases of AUB.

Materials and Methods

This prospective observational study was conducted by the department of OBG at Narayana medical college, Nellore, Andhra Pradesh from December 2019 to May 2020. All cases of abnormal uterine bleeding who fulfilled the inclusion criteria were included in the study.

Inclusion Criteria

- All cases presenting with abnormal uterine bleeding, attending the gynecology OPD with complaints of heavy menstrual bleeding, prolonged menstrual bleeding, Heavy Prolonged menstrual bleeding, Intermenstrual bleeding and continuous bleeding in the age group 21-60 years.

Exclusion Criteria

- Patients on cyclical hormones.
- Pregnant females.

Procedure

The detailed history and proper clinical findings were entered in a proforma case sheet. The clinical examination was done and necessary investigations were carried out. Histopathological examination of endometrial biopsies were done.

Statistical Analysis

The data was analyzed using SPSS software version.¹⁶ Descriptive statistics like mean and percentages were used to interpret the results.

Results

A total of 102 cases were included in this study at our hospital during the period of December 2019 to May 2020.

Table 1: Age wise distribution of study subjects.

Age (yrs)	Cases	Percentage
21-30 Yrs	16	15.7
31-40Yrs	30	29.4
41-50Yrs	52	50.1
51-60Yrs	4	4.8
Total	102	100.0

Out of 102 subjects enrolled into the study, maximum cases 52 (50.1%) were in the age of 41-50 yrs followed by 30 (29.4%) in the age group 31-40 years. The mean age of the patients was 44.87 (SD 9.67) years. (Table 1)

Table 2: Distribution of cases based on parity.

Parity	Cases	Percentage
Nulliparous	2	2
Primipara	10	9.8
Multipara	76	74.5
Grand multipara	14	13.7
Total	102	100.0

Majority of the cases were multipara 76 cases (74.5%) followed by grand multipara 14 cases (13.7%). (Table 2)

Table 3: Distribution of cases according to mode of presentation.

Presentation	Cases	Percentage
Heavy menstrual bleeding	55	53.9
Prolonged menstrual bleeding	22	21.6
Intermenstrual bleeding	11	10.8
Heavy Prolonged menstrual bleeding	8	7.8
Continuous bleeding	6	5.9
Total	102	100.0

In our study, the most common mode of presentation was heavy menstrual bleeding seen in 55 cases (53.9%) followed by prolonged menstrual bleeding in 22 cases (21.6%). (Table 3)

Table 4: Distribution of cases according to clinical causes of aub.

Causes	Cases	Percentage
Leiomyoma	58	56.9
DUB	39	38.2
Adenomyosis	3	2.9
Endometrial carcinoma	2	2
Total	102	100.0

The majority of the cases in our study were clinically diagnosed to have leiomyoma in 58 cases (56.9%) followed by DUB in 39 cases (38.2%), Adenomyosis in 3 cases (2.9%) and endometrial carcinoma in 2 cases (1.3%). (Table 4)

Table 5: Distribution of cases according to histopathology of endometrium.

Peripheral Smear	Cases	Percentage
Proliferative Endometrium	44	43.1
Secretory Endometrium	36	35.3
Endometrial Hyperplasia	15	14.7
Atrophic Endometrium	4	3.9
Adeno Carcinoma	3	3
Total	102	100.0

Proliferative endometrium was found in 44 (43.1%) cases followed by secretory endometrium in 36 (35.3%) cases and endometrial hyperplasia in 15 (14.7%) cases. (Table 5)

Discussion

Abnormal uterine bleeding accounts for more than 70% of all gynaecological consultations in the perimenopausal and postmenopausal years.² The maximum cases (50.1%) were in the age of 41-50 yrs followed by (29.4%) in the age group 31-40 years (Table 1). The results were in accordance with studies done by Saraswathi et al³ and Abdulla et al⁴ who reported that 33.5% and 33.1% of cases belonged to 41-50 years. The increased incidence of abnormal uterine bleeding in this age group (41-50 years) may be due to the fact that this is the age group which is approaching menopause and the cycles or the menstrual periods become short and intermittent. Majority of the cases were multipara (74.5%) followed by grand multipara (13.7%) (Table 2) which were consistent with the study done by Lotha L et al⁵ who noted 64.9% of the cases to be multipara whereas our study was in contrast to the study done by Khan R et al⁵ who noted the maximum cases to be from grand multipara. The most common mode of presentation were heavy menstrual bleeding (53.9%) followed by prolonged menstrual bleeding in (21.6%) cases (Table 3) which were consistent with the study done by Mahapatra Met al⁶ and Nisar S et al⁷ who noted heavy menstrual bleeding as the most common presentation in 48.6% and 46% of cases. The majority of the cases in our study were clinically diagnosed to have leiomyoma (56.9%) followed by DUB (38.2%) (Table 4) which were consistent with the study done by Lotha L et al⁵ who noted leiomyoma as the most commonest cause in 52.7% of cases whereas our study was in contrast to the study done by Mahapatra M et al⁶ who recorded DUB as the most commonest cause in 42.9% of cases. The commonest histopathological pattern was proliferative endometrium seen in (43.1%) cases followed by secretory endometrium in 35.3% (Table 5) which was in accordance with the study done by Bolde SA et al⁸ and Lotha L et al.⁵

Conclusion

From this study, we can conclude that abnormal uterine bleeding affects women of any age group more so in perimenopausal age group. Thorough evaluation is needed as the bleeding can be the

only manifestation in development of endometrial carcinoma. Histopathological evaluation of endometrium plays an important role in diagnosing and ruling out malignancies. However, in view of the wide variety of causes, abnormal uterine bleeding continues to be a diagnostic challenge during perimenopausal period.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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