

# A study of Abnormal Uterine Bleeding in Perimenopausal Women in a Tertiary Care Hospital

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## Abstract

Abnormal Uterine Bleeding (AUB) is a very common presenting symptom in the Gynecology department in all age groups. It is very significant in peri and postmenopausal age group because of the risk of malignancy is higher as the age advances. We in the present study tried to evaluate the clinical and pathological correlations in patients visiting our tertiary care hospital with symptoms of AUB. Methods: This Prospective cross-sectional study was conducted in the Department of Obstetrics and Gynecology, Prathima Institute of Medical Sciences [PIMS], Nagunoor, Karimnagar. N=60 patients that were included for the study. In the follow up n=7 patients were lost hence there was the n=53 number of patients who were included in this study. All the patients underwent the detailed history and complete clinical examination, required investigations like hysteroscopy, USG, computerized tomography (CT scan) and histopathological examinations were performed for the specimen from endometrial biopsy, D&C, cervical biopsy, or hysterectomy with or without salphingoophorectomy for the diagnosis in this study. Results: In the present study the most common pathological diagnosis was fibroids n=17 (32.07%), Dysfunctional uterine bleeding and Adenomyosis in n=8 (15.09%). Endometrial hyperplasia n=7 (13.20%), carcinoma cervix in n=5 (9.43%), and carcinoma endometrium in n=3 (5.66%), Endometrial metaplasia, endometrial polyps, and infections were found in n=1 cases each total n=3 included in the others. Similarly, the diagnosis of DUB was made in n=8 cases out of which n=5 were in the age group 40 - 45 years, n=2 in the age group 46 - 50 years and n=1 in the age group 51-55 years. Endometrial hyperplasia was found the total of n=7 cases out of which n=4 were in the age group 40 - 45 years, n=1 in the age group 46 - 50 years and n=2 in the age group 52 - 55 years the other distribution of cases according to age group. Conclusion: The patients presenting with AUB in peri and postmenopausal age group should be comprehensively analyzed including history, clinical examination, USG, and pathological examination. Benign lesions of endometrium and myometrium were the most common causes of AUB in our study. The incidences of cancers were greater with advancing age in this study.

**Keywords:** Abnormal Uterine Bleeding, perimenopausal women, Tertiary Care Hospital.

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## INTRODUCTION

Abnormal Uterine Bleeding (AUB) is a very common disorder affecting a large number of women of perimenopausal age group. The bleeding that does not correspond with normal duration, amount and frequency of flow of a menstrual cycle comes under the preview of AUB. AUB and its subgroup include heavy menstrual bleeding (HMB) affects approximately 14 - 25% of women [1, 2]. The prevalence increases with age adolescence and perimenopausal women are particularly affected with it and it is mostly associated with anovulatory menstrual cycles. Some pieces of evidence have suggested that it occurs in women who are ovulating but the progesterone sections are prolonged and estrogen levels remain low. This results

in irregular shredding of uterine lining and breaks through bleeding. Other studies have pointed that AUB may also be due to increased blood vessel fragility in the uterus. AUB is responsible for two-thirds of all hysterectomies around the world and is a great cause of morbidity and mortality in perimenopausal women [3]. The organic causes of AUB include benign pelvic lesions which include fibroids, adenomyosis, cervical and endometrial polyp, tuberculosis, infections and trauma, malignancy of cervix, endometrium or ovary and systemic illness like hypertension, diabetes mellitus and thyroids disorders) [4]. The line of investigations for patients of AUB starts from the through history, general physical examination, and systemic evaluation. Ultrasound is commonly used as it is a safe and non-invasive procedure for the detection of endometrial

pathology. Apart from these PAP smear, saline infusion salpingography hysteroscopy may be done. Histopathological examination of endometrial biopsies and curetting is generally considered as the gold standard procedures in the management of AUB. The surgical options for treatment of AUB are dilatation and curettage, endometrial ablation, hysteroscopic polypectomy, and hysterectomy. The ultimate goal of the treatment of AUB is the improvement of the quality of life of the patients [5]. With this background we in the present study tried to evaluate the etiological factors in AUB in perimenopausal women reporting to our hospital.

## MATERIAL AND METHODS

This Prospective cross-sectional study was conducted in the Department of Obstetrics and Gynecology, Prathima Institute of Medical Sciences [PIMS], Nagnoor, Karimnagar. Ethical committee permission was obtained for the study from the Institutional Ethical committee after submitting the protocol of the study. All the participants of the study gave written consent for voluntarily participating in the present study. Inclusion criteria were all the perimenopausal women (40-55 years), presenting with abnormal uterine bleeding were included. Exclusion criteria were PID, Pregnancy or suspected pregnancy complications, cervical stenosis. Based on the inclusion and exclusion criteria there were n=60 patients that were included for the study. In the follow up n=7 patients were lost hence there was the n=53 number of patients who were included in this study. All the patients underwent the detailed history and complete clinical examination, required investigations like hysteroscopy, USG, computerized tomography (CT scan) and histopathological examinations were performed for the specimen from endometrial biopsy, D&C, cervical biopsy, or hysterectomy with or without salpingo-oophorectomy for the diagnosis in this study. The period of follow up was from 6 to 12 months. The data obtained were recorded in the MS Excel and analyzed by SPSS version 17 for statistical analysis.

## RESULTS

The study was conducted on n = 53 patients and out the total of 53 patients n= 30 (56.60%) were

belonging to the age group of 46-50 years. N=15(28.30%) were belonging to the age group 51 -55 years and n=8 (15.09%) were in the age group 40-45 years (Table-1). In the present study, the most common pathological diagnosis was fibroids n=17(32.07%), Dysfunctional uterine bleeding and Adenomyosis in n=8(15.09%). Endometrial hyperplasia n=7(13.20%), carcinoma cervix in n=5(9.43%), and carcinoma endometrium in n=3(5.66%), Endometrial metaplasia, endometrial polyps, and infections were found in n=1 cases each total n=3 included in the others shown in Table-2.

**Table-1: Showing the age wise distribution of cases in the study**

Age Group	Number of patients	Percentage
40 – 45	08	15.09
46 – 50	30	56.60
51 - 55	15	28.30
Total	53	100

**Table-2: Clinicopathological correlation of the cases in the study**

Pathological Diagnosis	No of cases	Percentage
<b>Fibroids</b>	17	32.07
<b>DUB</b>	08	15.09
<b>Endometrial Hyperplasia</b>	07	13.20
<b>Carcinoma Cervix</b>	05	9.43
<b>Carcinoma Endometrium</b>	03	5.66
<b>Adenomyosis</b>	08	15.09
<b>Ovarian Tumor</b>	02	3.77
<b>Others</b>	03	5.66

The distribution of lesions was studied according to the age group fibroids were found in n =17 of which n =7 were in the age group 40 - 45 years, n=6 were in the age group 46-50 years and n=4 were in the age group 51-55 years. Similarly, the diagnosis of DUB was made in n=8 cases out of which n=5 were in the age group 40-45 years, n=2 in the age group 46-50 years and n=1 in the age group 51-55 years. Endometrial hyperplasia was found the total of n=7 cases out of which n=4 were in the age group 40 - 45 years, n=1 in the age group 46-50 years and n=2 in the age group 52 - 55 years the other distribution of cases according to the age group is shown in Table-3.

**Table-3: Distribution of lesion according to the age group**

Age Group	Fibroids	DUB	Endometrial Hyperplasia	Ca Cervix	Ca Endo	Adenomyosis	Ovarian	Other
40 – 45	7	5	4	0	0	3	0	1
46 – 50	6	2	1	2	1	2	0	2
51 - 55	4	1	2	3	2	3	1	1
Total	17	8	7	5	3	8	2	3

The endometrial examination by biopsy showed the following changes present in the endometrium. The proliferative phase was found in n=24(45.28%) of the patients followed by secretory phase in n=19 (35.85%) and hyperplasia 7 (13.21%), malignant tumors in n=3 (5.66%) shown in Table-4.

**Table-4: Endometrial changes in the study**

Endometrial changes	No of patients	Percentage
Proliferative	24	45.28
Secretary	19	35.85
Hyperplasia	07	13.21
Malignant tumors	03	5.66
Polyps	00	0.00
Total	53	100

## DISCUSSION

The clinical significance of AUB is because it may be a sign of malignancy also it affects the women's emotional, physical and social life. An accurate clinical diagnosis is therefore very important in order to ensure proper treatment is administered. Numbers of modalities of evaluation are done for the patients with AUB that involves USG, Hysteroscopy, and endometrial biopsy. Curettage is not advised in females with age less than 40 years as risk of malignancy is <1%. Transvaginal mode of USG is most preferred as the image quality is better as compared to transabdominal sonography. Organic causes of AUB are divided into reproductive tract disease, iatrogenic causes, and systemic diseases. In about 25% of these patients, the AUB is generally a result of organic abnormality [6]. In the present study the age groups involved were from 40 years to 55 years the Mean age group was 47 years. In this study, we found 32.07% of cases with Leiomyomas. Majority of Leiomyomas was generally found in the age group of 40 to 45 years the numbers of cases were decreasing with increasing age. The intramural type of Leiomyoma was the common presentation in this study which is in the correlation of other similar studies in this field [7-9]. In the current study functional endometrial disorders were in 15.09% of patients which is lesser when compared to other similar studies where the percentage of patients functional endometrial disorder was from 46 – 62% [10]. One of the reasons could be due to the inclusion of perimenopausal women within the age group 40-55 years of age as this study was on the perimenopausal women. It is well known that functional endometrial disorders are commonly seen in younger females. The study revealed a normal cyclic pattern of proliferative endometrium in 45.28% of cases and secretory endometrium in 35.85% of cases. Bleeding due to lack of progesterone from non-development of corpus luteum is seen in anovulatory cycles however, in ovulatory cycles the luteal phase defects and irregular shredding due to persistence of corpus luteum and prolonged secretion of progesterone levels is seen it is concordance with other similar studies done be

Saraswathy *et al.*, and Amrutha Padhey *et al.*, [11, 12] The carcinoma cervix was seen in the age group of 46-50 years n=2 cases and 51 – 55 years n=3 cases. The chief complaint in these cases was continuous bleeding and postmenopausal bleeding other studies has shown that the average age for the development in carcinoma in situ is 38 years and invasive cancer is 48 years [7]. The current study also has shown that endometrial hyperplasia was mainly seen in the age group of 40-45 years. Out of the total of n=7, n=4 (57.14%) were showing the features of simple hyperplasia without atypia and no case of malignancy was found in agreement with other studies [12-16]. Endometrial carcinoma was found in n=5 cases with n=2 in 46-50 years age and n=3 in 51-55 years of age group. In n=3 cases, the carcinoma was endometrioid type and in n=2 case, it was stromal sarcoma. The various histopathological types of endometrial adenocarcinomas were papillary carcinoma in one case and well-differentiated endometrioid type in one case the observations were in agreement with other similar studies [10, 17, 18].

## CONCLUSION

The patients presenting with AUB in peri and postmenopausal age group should be comprehensively analyzed including history, clinical examination, USG, and pathological examination. Benign lesions of endometrium and myometrium were the most common causes of AUB in our study. The incidences of cancers were greater with advancing age in this study.

**Conflict of Interest:** None

**Source of Support:** Nil

**Ethical Permission:** Obtained

## REFERENCES

1. Fraser, I. S., Langham, S., & Uhl-Hochgraeber, K. (2009). Health-related quality of life and economic burden of abnormal uterine bleeding. *Expert Review of Obstetrics & Gynecology*, 4(2), 179-189.
2. Shapley, M., Jordan, K., & Croft, P. R. (2004). An epidemiological survey of symptoms of menstrual loss in the community. *Br J Gen Pract*, 54(502), 359-363.
3. Kotdawala, P., Kotdawala, S., & Nagar, N. (2013). Evaluation of endometrium in peri-menopausal abnormal uterine bleeding. *Journal of mid-life health*, 4(1), 16-21.
4. Padubidri, V. G., & Daftray, S. N. Shaw's Textbook of Gynaecology, 16th edition, chapter-24; 335-348.
5. Albers, J. R., Hull, S. K., & Wesley, R. M. (2004). Abnormal uterine bleeding. *American family physician*, 69(8), 1915-1934.
6. Brenner, P. F. (1996). Differential diagnosis of AUB. *Am J Obstet Gynecol*, 175:766-79.

7. Jutras, M. L., & Cowan, B. D. (1990). Abnormal bleeding in the climacteric. *Obstetrics and gynecology clinics of North America*, 17(2), 409-425.
8. Garcia, C. R. (1993). Management of the symptomatic fibroid in women older than 40 years of age. Hysterectomy or myomectomy?. *Obstetrics and gynecology clinics of North America*, 20(2), 337-348.
9. O'Connor, D. M., & Norris, H. J. (1990). Mitotically active leiomyomas of the uterus. *Human pathology*, 21(2), 223-227.
10. Sudhamani, S., Sirmukaddam, S., & Agrawal, D. (2015). Clinicopathological study of abnormal uterine bleeding in perimenopausal women. *Journal of the Scientific Society*, 42(1), 3-6.
11. Gredmark, T., Kvint, S., Havel, G., & Mattsson, L. Å. (1995). Histopathological findings in women with postmenopausal bleeding. *BJOG: An International Journal of Obstetrics & Gynaecology*, 102(2), 133-136.
12. Doraiswami, S., Johnson, T., Rao, S., Rajkumar, A., Vijayaraghavan, J., & Panicker, V. K. (2011). Study of endometrial pathology in abnormal uterine bleeding. *The journal of obstetrics and gynecology of India*, 61(4), 426-430.
13. Winkler, B. A. R. B. A. R. A., Alvarez, S. E. N. A. I. D. E., Richart, R. M., & Crum, C. P. (1984). Pitfalls in the diagnosis of endometrial neoplasia. *Obstetrics and gynecology*, 64(2), 185-194.
14. Ng, A. B., Reagan, J. W., & Cechner, R. L. (1973). The precursors of endometrial cancer: a study of their cellular manifestations. *Acta cytologica*, 17(5), 439-448.
15. Ferenczy, A., & Gelfand, M. (1989). The biologic significance of cytologic atypia in progestogen-treated endometrial hyperplasia. *American journal of obstetrics and gynecology*, 160(1), 126-131.
16. Dunn, T. S., Stamm, C. A., Delorit, M., & Goldberg, G. (2001). Clinical pathway for evaluating women with abnormal uterine bleeding. *The Journal of reproductive medicine*, 46(9), 831-834.
17. Shwayder, J. M. (2000). Pathophysiology of abnormal uterine bleeding. *Obstetrics and gynecology clinics of North America*, 27(2), 219-234.
18. Burke, T. W., Tortolero-Luna, G., Malpica, A., Baker, V. V., Whittaker, L., Johnson, E., & Follen, M. M. (1996). Endometrial hyperplasia and endometrial cancer. *Obstetrics and gynecology clinics of North America*, 23(2), 411-456.