

## Abnormal Uterine Bleeding: A Clinical Evaluation

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### Abstract

*Introduction:* Bleeding that occurs between menstrual periods or excessive menstrual bleeding is considered to be abnormal uterine bleeding. Once a woman who is not taking hormone therapy enters menopause and the menstrual cycles have ended, any uterine bleeding is considered abnormal. *Methodology:* All patients in the perimenopausal age group ( $45 \pm 5$  years) with symptoms of abnormal uterine bleeding presenting at hospital were included in the study. Totally 100 study subjects were included in the study. *Results:* The most common bleeding pattern was menorrhagia (64%) followed by polymenorrhea (28%), metrorrhagia (18%) and menometrorrhagia (8%) *Conclusion:* Accurate diagnosis of the causative factor of abnormal uterine bleeding in any age group is of importance so that appropriate management can be initiated

**Keywords:** Abnormal Uterine Bleeding; Polymenorrhea; Clinical Evaluation.

### Introduction

Normal menstruation is defined as bleeding from secretory endometrium associated with ovulatory cycles, not exceeding a length of 5 days [1].

In women who menstruate, the endometrium thickens every month in preparation for pregnancy. If the woman does not become pregnant, the endometrial lining is shed during the menstrual period. After menopause, the lining normally stops growing and shedding.

Under normal circumstances, a woman's uterus sheds a limited amount of blood during each menstrual period (less than 5 tablespoons or 80 mL). Bleeding that occurs between menstrual periods or excessive menstrual bleeding is considered to be abnormal uterine bleeding. Once a woman who is not taking hormone therapy enters menopause and the menstrual cycles have ended, any uterine bleeding is considered abnormal [2].

In the normal menstrual cycle, there is an orderly cyclic hormone production and parallel proliferation of the uterine lining in preparation for implantation of the embryo. Disorders of the menstrual cycle and, likewise, disorders of menstrual physiology may lead to various pathologic states, including infertility, recurrent miscarriage, and malignancy.

Goldstein et al defined abnormal uterine bleeding as "Patients having either metrorrhagia defined as vaginal bleeding separated from expected menses or menorrhagia defined as patients' subjective complaints of either increased duration or increased volume of flow or both" [3].

Over the past decade it has become abundantly clear that many terms used to describe menstrual symptoms and causes of abnormal menstrual bleeding are ill defined and confusing [4].

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## Methodology

All patients in the perimenopausal age group (45±5 years) with symptoms of abnormal uterine bleeding presenting at hospital were included in the study. Sample size is based on level of precision; precision consists of significance level and allowable error. In this study 5% significance and 20% allowable error is considered.

Totally 100 study subjects were included in the study.

Data was collected using Pre tested semi structured Questionnaire which was filed by the investigator

### Inclusion Criteria

- patients in the perimenopausal age group (45 ± 5 years)
- Abnormal uterine bleeding.

### Exclusion Criteria

- Patients less than 40 years of age.
- Patients with uterine bleeding due to Intra-uterine Devices
- Patients not giving their consent to participate in the study

## Results

It was found that highest proportion of patients were in the age group of 40 – 41 years (30%) followed by 44 – 45 years (28%), 48 – 49 years (16%), 50 years (12%) and 42 – 43 years (6%)

In this study, 30% of patients attained the age of menarche at 12 years. 28% of patients attained the age of menarche at 13 years. 20% of patients attained the age of menarche at 11 years. 18% of patients attained the age of menarche at 14 years. 4% of patients attained the age of menarche at 16 years

**Table 1:** Distribution based on age

Age group	Frequency	Percentage
40 – 41 years	30	30.0
42 – 43 years	06	06.0
44 – 45 years	28	28.0
46 – 47 years	08	08.0
48 – 49 years	16	16.0
50 years and above	12	12.0
Total	100	100

**Table 2:** Distribution based on age of menarche

Age of menarche	Frequency	Percentage
11 years	20	20.0
12 years	30	30.0
13 years	28	28.0
14 years	18	18.0
16 years	04	04.0
Total	100	100

**Table 3:** Clinical profile

Parameters	Frequency (n=100)	Percentage
<b>Parity</b>		
Nulliparous	04	04.0
Multiparous	72	72.0
Grand multiparous	24	24.0
<b>Menstrual cycle</b>		
Regular	76	76.0
Irregular	24	24.0
<b>Bleeding pattern</b>		
Menorrhagia	64	64.0
Metrorrhagia	18	18.0
menometrorrhagia	08	08.0
Oligmenorrhoea	00	00
Polymenorrhoea	28	28.0
<b>Complaints</b>		
Pain abdomen	28	28.0
Dysmenorrhoea	16	16.0
Back ache	02	02.0
Generalized weakness	02	02.0
Mass per vagina	02	02.0

Among total study subjects, 72% were multiparous, 24% were grand multiparous and 4% nulliparous.

The most common bleeding pattern was menorrhagia (64%) followed by polymenorrhea (28%), metrorrhagia (18%) and menometrorrhagia (8%).

The most common presenting symptom was pain abdomens (28%) followed by dysmenorrhea (16%), and back ache (2%).

## Discussion

The highest incidence of AUB was noted in the 41-50 years age group in the present study which is in concordance with the results of the studies by Anusuya Das [5] (1964) and Bhattacharji [6] (1964) whereas Sutherland [7] (1950), Muhammed Muzaffar [8] (2005), Doraiswami Saraswathi [7] (2011) reported maximum incidence in 41-50 years age group and Mehrotra et al [9] (1972), Wagh and Swamy [10] (1964) and Dawn [11] (1964) reported maximum incidence in 21-30 years age group.

Considering these discrepant observations, one may conclude that, any age after menarche is not exempt from AUB. The highest incidence of AUB was seen in the reproductive age group (21-40 years) in the present study (60.5%) which is in concordance with the results of the studies by Sutherland [9] (58.5%) and Mehrotra VG et al [9] (71.3%).

In the present study, heavy menstrual bleeding was the commonest type of bleeding (64%) followed by intermenstrual bleeding (18%), heavy and prolonged bleeding (8%), frequent menstrual bleeding (28%) and oligomenorrhea (0%) in that order, whereas in the study by Mehrotra VG [9] showed heavy menstrual bleeding was the commonest type of bleeding followed by frequent menstrual bleeding, intermenstrual bleeding and postmenopausal bleeding in that order.

## Conclusion

AUB is one of the most common problems in women of all age groups in reproductive period. It is a challenging gynecological problem caused by various

endometrial pathologies.

Endometrium is the mirror of hormonal status in women. Histological variations can be seen in the endometrium according to age of women and phase of her menstrual cycle and any other specific pathology

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