


Original Research Article

# Analysis of etiology in women who underwent surgical management for abnormal uterine bleeding in a tertiary care centre, Visakhapatnam

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## Abstract

**Background:** Abnormal uterine bleeding (AUB) is the one of the most common problem among patients admitted for gynecological surgeries. There are various pathologies which can lead to AUB. History, blood investigations, ultrasonography, hysteroscopy and endometrial aspiration and those who failed to respond for medical management, underwent surgical profile and hysterectomies were done. Later on, FIGO proposed PALM-COEIN system for systematic and efficient management of AUB, which helps in better and successful management of AUB patients.

**Aim:** To analyze the etiology of abnormal uterine bleeding in women who underwent surgical management.

**Materials and methods:** It was a retrospective study done in Obstetrics and Gynecology Department of King George Hospital, Visakhapatnam from January 2017 to December 2018. A total of 143 cases who failed to respond for medical management and underwent surgeries like hysterectomies, myomectomies and polypectomies for AUB, were selected and hysterectomy specimens were evaluated in a structured proforma.

**Results:** The most common age-group presenting with AUB was 45 to 49 years of age (30.06%). Dysmenorrhoea was found to be the most common associated symptom in AUB patients (68.3%). The most common surgical procedure done was Total Abdominal Hsterectomy (75%). As per PALM-COEIN classification, the most common type in our study was found to be AUBL (48.2%).

**Conclusions:** Incidence and pattern of AUB varies according to the age of the patient. It is more common in perimenopausal age-group. Classification of AUB as per PALM-COEIN helps in better understanding of disease and successful management of patients.

## Key words

Surgical management, Abnormal uterine bleeding, Etiology, Women.

## Introduction

Abnormal uterine bleeding is the most common problem among patients admitted for gynecological surgeries. Abnormal uterine bleeding may be acute or chronic and is defined as bleeding from the uterine corpus that is abnormal in regularity, volume, frequency, or duration and occurs in the absence of pregnancy [1]. There are various pathologies which can lead to AUB. History, blood investigations, ultrasonography and endometrial samplings [4] and those who failed to respond for medical management, underwent surgical profile and hysterectomies were done. Later on they are classified as per PALM COIEN classification, which helps in better and successful management of AUB patients.

## Aim

- To analyze gynecological surgeries for women with AUB admitted in Gynec ward in King George Hospital, Visakhapatnam during 2017 January to 2018 December.

## Materials and methods

It was a retrospective study done in OBG department of KGH in a single unit, from January 2017-December 2018. A total of 143 cases who failed to respond for medical management and underwent surgeries like hysterectomies, myomectomies and polypectomies for AUB were selected and hysterectomy specimens were evaluated in a structured proforma.

**Inclusion criteria:** All women of reproductive and perimenopausal age group women suffering

from AUB, those who failed medical management were included.

**Exclusion criteria:** Pregnant women with bleeding, adolescent girls with bleeding and postmenopausal bleeding.

## Results

Age distribution of study population was as per **Table - 1**. Distribution of study group based on associated complaints was as per **Table - 2**.

**Table - 1:** Age distribution of study population.

Age group (Years)	Overall (n= 143%)
30 - 34	29(20.2%)
35 - 39	34(23.7%)
40 - 44	36(25.1%)
45 - 49	44(30.7%)

**Table - 2:** Distribution of study group based on associated complaints.

Complaint	Overall n=61(%)
Dysmenorrhoea	41(67.2%)
Mass per abdomen	16(26.2%)
Mass pervagina	4(6.5%)

**Table - 3:** Distribution of study group on PALM-COEIN classification.

Category	No. of patients n=143(%)
Polyp(P)	26(18.1%)
Adenomyosis(A)	25(17.4%)
Leiomyoma(L)	69(48.2%)
Malignancy(M)	3(2.09%)
Coagulopathy(C)	0
Ovulatory dysfunction(O)	20(13.9%)
Endometrial(E)	0
Iatrogenic(I)	0
Not yet classified(N)	0

**Table – 4:** Distribution of patients in relation to presenting symptom.

	HMB	Intermenstrual bleeding	Dysmenorrhoea	Mass P/A	Mass P/V
<b>Fibroid</b>	52	2	24	14	1
<b>Polyp</b>	-	5	3	-	-
<b>Adenomyosis</b>	15	-	17	2	0
<b>Hyperplasia</b>	-	3	-	-	-

Distribution of study group on PALM-COEIN classification was as per **Table – 3**. Distribution of patients in relation to presenting symptom was as per **Table – 4**. Distribution of patients according to Gynecological surgeries was as per **Table – 5**. Distribution of patients according to histological lesion was as per **Table – 6**.

**Table – 5:** Distribution of patients according to Gynecological surgeries.

<b>Surgery</b>	<b>No. of cases n=143(%)</b>
TAH	108(75.5%)
TAH with BSO	10(6.9%)
LAVH	4(2.7%)
VH	2(1.3%)
Myomectomy	7(4.8%)
Polypectomy	12(8.3%)

**Table – 6:** Distribution of patients according to histological lesion.

<b>Histological subtype</b>	<b>No. of cases n=124(%)</b>
Proliferative	85(68.5%)
Secretory	34(27.4%)
Atrophic	2(1.6%)
Hyperplasia	3(2.4%)

## Discussion

The etiologies of AUB are multifactorial. Menstrual Disorders Working Group of the International Federation of Gynecology and Obstetrics proposed a classification system and standardized terminology for the etiology of AUB, which has been approved by FIGO and supported by the American College of Obstetricians and Gynecologists [2, 3]. With this system, etiologies of AUB are classified as related to uterine structural abnormalities and unrelated to uterine structural abnormalities and

categorized as acronym PALM-COEIN: Polyp, Adenomyosis, Leiomyoma, malignancy and hyperplasia, Coagulopathy, Ovulatory dysfunction, Endometrial, Iatrogenic and Not otherwise classified.

The most common histological diagnosis reported for hysterectomy specimens of AUB in our study was Leiomyoma (48.2%) followed by Polyp (18.1%). Leiomyoma is the most frequent benign uterine tumor that develops during reproductive age. According to the study done by Qureshi and Yusuf [5] in 2013, maximum patients of AUB were classified under leiomyoma. Increased endometrial surface area and presence of fragile and engorged vessels in perimyoma environment can be the cause of AUB [6]. With effect on angiogenesis, change in coagulation can be the pathology of AUB in fibroid [7].

The incidence of benign endometrial polyp was high in 40-49 years age group. The contribution of polyps to AUB varies from 3.7% to 65% [8, 9]. The lower incidence in younger age is due to normal cycling endometrium and endometrial polyp spontaneously regresses. The incidence of endometrial hyperplasia in this study was less as compared to others. Diagnosing the patients at the earliest stage of this spectrum will be of definitive help to the practicing gynecologists to prevent the disease progression and prompt management of premalignant lesions.

## Conclusion

Incidence and pattern of AUB varies according to the age and reproductive state of patient. One cannot manage every patient in a similar manner. After proper classification of AUB by PALM-COEIN patients can be treated medically or

surgically according to the cause, leading to better success rate. After careful history and complete workup of patients of abnormal uterine bleeding, they can be categorized into PALM-COEIN system and management can be done in a better way.

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