

TO CATEGORIZE THE CAUSES OF ABNORMAL UTERINE BLEEDING IN PERIMENOPAUSAL WOMEN AS PER THE NEW CLASSIFICATION SYSTEM PALM COEIN BY THE INTERNATIONAL FEDERATION OF GYNAECOLOGY AND OBSTETRICS (FIGO) AT SMS MEDICAL COLLEGE, JAIPUR

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Abstract

Background: The International Federation of Gynaecology and Obstetrics working group on menstrual disorders has recently developed a classification system (PALM-COEIN) for causes of the AUB in non-gravid women.

Methods: This was a hospital based descriptive study conducted on perimenopausal women with complaints of abnormal uterine bleeding admitted in Obstetrics and Gynaecology, SMS Medical College, Jaipur.

Results: Leiomyoma being the most common tumor of female genital tract constituted the most common etiology of AUB on the basis of clinical examination, followed by ovulatory disorders, which are predominant during the period of perimenopausal transition.

Conclusion: The FIGO PALM-COEIN classification system helps to simplify terminology, focus treatment concepts and facilitate clinical and scientific research collaboration.

Keywords: FIGO, Classification, Gynaecological practice.

Introduction

The International Federation of Gynaecology and Obstetrics working group on menstrual disorders has recently developed a classification system (PALM-COEIN) for causes of the AUB in non-gravid women.¹ There are nine main categories, which are arranged according to the acronym PALM-COEIN: Polyp; adenomyosis; leiomyoma; malignancy and hyperplasia; coagulopathy; ovulatory dysfunction; endometrial; iatrogenic; and not yet classified. According to the proposed classification system, non-specific term like dysfunctional uterine bleeding should be abandoned in favor of a more specific aetiology like ovulatory dysfunction.

Because of its broad range of differential diagnosis, the diagnosis of AUB can be quite challenging. AUB always mandates evaluation. Besides systemic, iatrogenic or hormonal age-related causes, the main aim of investigating this particular age group of women is to rule out organic diseases of the uterus and to confirm the benign nature of the problem, by ruling out endometrial carcinoma, so that medical treatment or conservative surgery can be offered and unnecessary radical surgery can be avoided. Diagnostic techniques are ultrasonography & endometrial biopsy.

The endometrium represents a plethora of changes ushered in by the complex interplay of endogenous sex

steroids & other factors. The manifestations of various disease patterns can be detected by histological variations of endometrium e.g. polyps, submucous myomas, endometrial hyperplasia, and endometrial carcinoma in this age group of women. The endometrial histology clinches the diagnosis and guides the management plan. FIGO recommends endometrial tissue testing as a first line management in women of perimenopausal age group who present with AUB.^{2,3}

Material and Methods

Descriptive type of observational study was conducted among women with AUB who presented to the Gynaecology OPD.

Study Design:

Hospital based cross sectional study.

Study Period:

June 2018 to September 2019.

Study Setting:

The study was conducted at Department of Obstetrics and Gynecology, SMS Medical College, Jaipur

Study Population:

Patients admitted in Department of Obstetrics and Gynecology, SMS Medical College, Jaipur.

Inclusion Criteria

Women >40 years with complaints of abnormal uterine bleeding.

Exclusion Criteria

- Postmenopausal women
- Women with cervical causes of bleeding
- Pregnant women
- Local lesions

Methodology

After written and informed consent to the patient.

This was a hospital based descriptive study conducted on perimenopausal women with complaints of abnormal uterine bleeding admitted in Obstetrics and Gynaecology, SMS Medical College, Jaipur.

All perimenopausal women with complaints of Abnormal Uterine bleeding admitted in the hospital underwent a complete clinical workup. Patients were analysed for age, parity, socioeconomic status, duration of symptoms and type of menstrual abnormality.

A structured history with special consideration of previous and current menstrual history, history of contraception use, medical/ surgical history followed by general, physical, systemic and gynaecological examination.

On gynaecological examination, cervix (position of cervix, condition of cervix- erythematous, hypertrophy, mobility, presence of polyp, ectopy), uterus (size, position, consistency, and mobility) and adnexa assessed.

Clinical diagnosis made and investigations, including USG done.

An investigation includes CBC, ESR, platelet count, RFT, LFT, Coagulation profile, Thyroid profile.

A pelvic ultrasound to assess the uterus (uterine size, endometrial thickness, presence of endometrial polyp, any endometrial growth, adenomyosis, fibroids) and ovarian status (presence of any cyst, mass and its characteristics) was done.

Clinical diagnosis was made. A patient was subjected for endometrial biopsy and follow up histopathological reports was assessed.

Results

Table 1: PROPORTION OF CASES OF PERIMENOPAUSAL AUB

Total No. of Gynaecological Admissions	703
Total No. of cases of perimenopausal women with complaints of AUB	100 (14.2%)

Of the total number of gynaecological admissions in the hospital i.e. 703, 14.22% comprised of perimenopausal women with complaints of Abnormal Uterine Bleeding, who were taken up for the study.

Table 2: DISTRIBUTION OF CASES AS PER CLINICAL DIAGNOSIS

DIAGNOSIS	NO. OF CASES	%
AUB-P (Polyp)	3	3%
AUB-A (Adenomyosis)	4	4%
AUB-L (Leiomyoma)	41	41%
AUB-M (Malignancy & Hyperplasia)	3	3%
AUB-C (Coagulopathy)	00	0.0%
AUB-O (Ovulatory disorders)	37	37%
AUB-I (Iatrogenic)	00	0.0%
AUB-E (Endometrial)	12	12%
AUB-N (Not yet classified)	00	0.0%

Leiomyoma being the most common tumor of female genital tract constituted the most common etiology of AUB on the basis of clinical examination, followed by ovulatory disorders, which are predominant during the period of perimenopausal transition.

Table 3: DISTRIBUTION OF CASES AS PER HISTOPATHOLOGY BASED DIAGNOSIS

DIAGNOSIS	NO. OF CASES	%
AUB-P (Polyp)	4	4%
AUB-A (Adenomyosis)	8	8%
AUB-A;L (Adenomyosis & Leiomyoma)	4	4%
AUB-L (Leiomyoma)	37	37%
AUB-M (malignancy & Hyperplasia)	10	10%
AUB-C (Coagulopathy)	00	0.0%
AUB-O (Ovulatory disorders)	31	31%
AUB-I (Iatrogenic)	00	0.0%
AUB-E (Endometrial)	5	6%
AUB-N (Not yet classified)	00	0.0%

On the basis of histopathology also leiomyomas constituted most cases of AUB followed by ovulatory disorders since these disorders are common in this age group.

Discussion

The study was conducted from June 2017 to September 2019 in SMS Hospital in collaboration with Department of Pathology, SMS Medical College, Jaipur. Out of 700 gynaecological admissions during the study period, there were 100 perimenopausal women who presented with the complaints of abnormal uterine bleeding and were included in the study.

In the present study, AUB-L i.e. leiomyomas accounted for the maximum number of cases, 37.28% followed by ovulatory disorders i.e AUB-O in 30.5% cases.

Being the most common benign tumors of genital tract, Leiomyomas have been found causative for AUB in a

maximum number of cases in most studies, including the present study. Age is the most common risk factor, with lifetime risk in women over the age of 45 yrs to be more than 60%. Higher association of AUB is seen with submucosal type, compared with intramural and subserous type.⁴

In perimenopausal years, ovulatory disorders are common due to derangements in the hypothalmo-pituitary-ovarian axis resulting in derangements of follicular maturation, ovulation or corpus luteum formation and anovulatory cycles are most frequent, chronic anovulation is associated with an irregular and unpredictable pattern of bleeding.⁵ This explains why ovulatory disorders were found to be the second most common cause of AUB in this study and most other studies.

The other important cause of AUB was AUB-M i.e. Malignancy & Hyperplasia. The unopposed estrogenic action on the endometrium in the anovular cycles found in perimenopausal women predisposes them to develop hyperplasia and eventually endometrial Carcinoma.⁶ In the present study, endometrial hyperplasia accounted for 8.9% cases and Adenocarcinoma for 1.2% cases. The average age for women with endometrial carcinoma is 61 years but 5-30% cases occur in premenopausal woman.⁷

AUB-A (Adenomyosis) accounted for 8.47% cases followed by AUB-E (Endometrial causes) constituting 5.5% cases, AUB -A; L (Adenomyosis & Leiomyoma) 4.23% cases and AUB-P (polyp) constituting 3.81% cases

The FIGO PALM-COEN classification system helps to simplify terminology, focus treatment concepts and facilitate clinical and scientific research collaboration. Furthermore, it provides a scaffold to structure more effective clinical teaching and serve to enhance and clarify communication within and between specialities.⁸

The new classification should facilitate multi-institutional investigation into the epidemiology, etiology and treatment of women with acute and chronic AUB. This will

require periodic modification and revision based upon further research.⁸

Conclusion

The FIGO PALM-COEN classification system helps to simplify terminology, focus treatment concepts and facilitate clinical and scientific research collaboration.

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