



A CLINICAL EVALUATION OF THE CASES BASED ON NEW FIGO CLASSIFICATION SYSTEM –PALM COEIN

Gynaecology

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ABSTRACT

Objective: To categorize all women with abnormal uterine bleeding admitting a tertiary care centre according to new classification system by the International Federation of Gynaecology and Obstetrics (FIGO).

Methods: The prospective inpatient hospital based study comprised all non-gravid women age with unpredictable, excessive duration, abnormal volume, and/or abnormal frequency of menses admitted in department of obstetrics and gynaecology, Umaid hospital, Dr. S.N. Medical College, Jodhpur from September 2014 to February, 2015. The subjects underwent structured history, physical examination and pelvic ultrasonography. Endometrium and hysterectomy specimen were obtained for histopathology where applicable. Possible underlying causes were categorised according to the new classification system.

Results: There were 254 admitted during study period time. Out of which 100 cases were of AUB, so, the incidence was 39.37% of abnormal uterine bleeding. PALM-COEIN categorization done that showed 7% polyp, 21% adenomyosis, 34.2% leiomyoma, 10.5% malignancy and hyperplasia, 0.9% coagulopathy, 21.1% ovulatory dysfunction, 5.3% endometritis. The structural causes constitute 72.7% and non structural causes constitute 27.3%.

Conclusion: The classification should facilitate multi-institutional investigation into the epidemiology, etiology and treatment of women with Abnormal Uterine Bleeding.

KEYWORDS

Abnormal uterine bleeding, Classification, Dysfunctional uterine bleeding, Menstrual disorders

Introduction : Abnormal Uterine Bleeding (AUB) is defined as bleeding from the uterine corpus that is abnormal in volume, regularity, and/or timing. It is described as 'chronic' if that has been present for the majority of the preceding 6 months, and 'acute' if sufficiently heavy bleeding necessitating rapid treatment/intervention. AUB is a common problem encountered by women of all age groups, responsible for around 20-30% visits to out patient department in reproductive age group and 69% in peri or postmenopausal age group.¹ For about a decade, there is a growing concern worldwide regarding the use of terminologies and definitions around the symptom of AUB and these are leading to increasing difficulties in designing multinational clinical trials and in the interpretation of isolated research studies.² There have been several publications addressing this issue. In 2007 a publication proposed a method to reach a consensus under the title "process designed that leads to international agreement on terminologies and definitions used to describe abnormalities of menstrual bleeding".³ The major emphasis was on replacement of terms like 'Menorrhagia', 'Metrorrhagia', 'Hypermenorrhoea' and 'Dysfunctional Uterine Bleeding'. Use of simpler terms with clear meanings was recommended that have a potential to be understood by health professionals and patients alike and that can be translated into most languages. In 2011, a new system for the classification of AUB was approved by the International Federation of Gynecology and Obstetrics (FIGO) Executive Board as the FIGO classification system, which included contributions from an international group of clinician-investigators from 6 continents and over 17 countries.^{4,5} It is perceived that the new terminologies would facilitate the application of evidence-based research to clinical practice.⁶

This classification system is stratified into nine basic categories that are arranged according to the acronym PALM-COEIN: polyp, adenomyosis, leiomyoma, malignancy and hyperplasia, coagulopathy, ovulatory dysfunction, endometrial disorder, iatrogenic and not yet

In general, well-defined structural entities, measurable visually by the use of imaging techniques and/or by the use of histopathology constitute the PALM group, while non-organic varieties not defined by imaging or histopathology comprise the COEIN group. This system recognises instances of contribution of more than one pathology in an

individual symptomatic woman and also lack of contribution of a coincidental asymptomatic pathology towards AUB due to other cause(s). The present study categorised women with AUB according to the PALM-COEIN classification system which is a step towards adopting new terminologies.

Structural causes

Polyp
Adenomyosis
Leiomyoma
Malignancy & Hyperplasia

Submucosal
Other



Nonstructural causes

Coagulopathy
Ovulatory Dysfunction
Endometrial
Iatrogenic
Not yet classified



Figure-1: Adopted from Menro et al [5] FIGO classification system (PALM-COEIN) for causes of abnormal uterine bleeding in non-gravid women of reproductive age.

Patients and Methods : The prospective inpatient hospital based study comprised all non-gravid women age with unpredictable, excessive duration, abnormal volume, and/or abnormal frequency of menses admitted in department of obstetrics and gynaecology, Umaid hospital, Dr. S.N. Medical College, Jodhpur from September 2014 to February, 2015. All non-gravid women of with unpredictable, irregular, excessive duration, abnormal volume, and/or abnormal frequency of menses and intermenstrual bleeding for at least the preceding months admitted to the department underwent structured history, physical examination and pelvic ultrasonography. Women with obvious cervical cause for vaginal bleeding were excluded. Endometrium and hysterectomy specimen were obtained for histopathology where applicable. Possible underlying causes were categorised according to the PALM-COEIN classification system.⁷ 'Coagulopathy' was labeled for all previously known cases of defects of coagulation from younger age. 'Ovulatory dysfunction' was defined as unpredictable timing and variable amount of bleeding, while 'endometrial disorder' referred to cases when AUB occurred in line with predictable / cyclical pattern. No structural alteration could be appreciated in the uteri of the latter two categories. 'Iatrogenic' category was characterized by the identification of hormone-steroid

intake during the preceding 3 months and/or onset of symptoms following contraceptive device or method. Data was analyzed and statistics were presented as frequencies and percentages and bar chart. Results :Out of 254 women admitted the gynaecological department for various complaints during the study period of them, 39.37 % (100) presented with AUB. In our study, most patients were of 41 to 50 years of age groups, which is most common age groups (45%). (Table no.1)

Table no.1 Age wise distribution of cases of AUB:-

Age (in years)	Number	Percentage
Upto 30	08	8.0%
31 – 40	39	39%
41 – 50	45	45%
51 – 60	07	7%
>60	01	1%

All these cases were placed in the nine categories of the PALM-COEIN classification (Figure-1). 'Leiomyoma' was the commonest (34.2%) category, followed by ovulatory dysfunction (21.1%) and adenomyosis (21%).

PALM COEIN	Number	Percentage
Polyp	08	7%
Adenomyosis	24	21%
Leiomyoma	39	34.2%
Malignancy & hyperplasia	12	10.5%
Coagulopathy	01	0.9%
Ovulatory dysfunction	24	21.1%
Endometrial	06	5.3%
Iatrogenic	0	0%
Not classified	0	0%

Discussion : Abnormal uterine bleeding is most common gynecological conditions for which women seek advice to doctor. It is most common complaint encountered in gynecological outpatient. The causes of AUB are diverse and may be associated with other medical and endocrinological disorders. They are difficult to diagnose.

To reach a precise underlying etiology is imperative for successful treatment of AUB. Useful interpretation of results of various clinical and basic science research studies aiming at determining epidemiology, etiology, treatment and prognosis of AUB was hampered due to lack of consistent classification. Adoption of new terminologies in clinical practice would prove to be a milestone in effective management of these women. The current agreement process was designed to create a practical system that could be used by clinicians in most countries worldwide to classify patients with AUB readily and consistently, based on the results of a systematic evaluation. The proposed PALM COEIN classification system was helpful in evaluation and workup of AUB patients properly and consistently. 'Leiomyoma' being the commonest cause of PALM categories of AUB is well established in literature.⁸ 'Dysfunctional uterine bleeding (DUB)' a now discarded term has significant health care implications⁹ and its definitive treatment short of hysterectomy often haunts a clinician and researcher alike.^{10,11} Women considered to have DUB in the past actually fall in FIGO categories of a varying combination of coagulopathy, disorder of ovulation, or primary endometrial disorder leading to a primary or secondary disturbance in local endometrial haemostasis.

Conclusion : The new classification should facilitate multi-institutional investigation into the epidemiology, etiology and treatment of women with AUB. This will require periodic modification and revision based upon further research. This study provides baseline data to follow the PALM- COEIN classification and find out relative proportions of each cause. Such studies will help in providing data for comparative and epidemiological studies in various populations. More studies need to be conducted for finding out the causes for the increased prevalence of leiomyoma in the region.

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