Irregular Non-Gravid Uterine Hemorrhage in Women

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ABSTRACT

Introduction: Abnormal uterine bleeding (AUB) is a common health problem for about 30% of reproductive-age women and is experienced by 15-20% of women attending outpatient gynecology clinics.

Aims and Objective: The aim of this study was to observe the number of patients coming with complaints of abnormal uterine bleeding in a non-gravid women of different age groups in outpatient clinic and their classification as per PALM COEIN method.

Methods: Total patient seen in OPD were 1374 out of which 35 patients presented with complaints of abnormal uterine bleeding
from 1st August 2017 to 10th February 2018.

Results: Median age in the study group was 42 years. Most common cause was endometrial (37.14%) followed by Leiomyoma (22.85%). There were 20% of the patients who were having more than one cause. Endometrial biopsy was carried out in 3(OPD pipel biopsy), D&C in 4, Medical management in 15, MRI in 1, Surgery performed in 12 and no treatment in 3 cases.

Conclusion: PALM-COEIN classification is a practical way of determining the etiology and choosing the appropriate treatment modality in patients with abnormal uterine bleeding in outpatient clinic.

INTRODUCTION

Abnormal uterine bleeding (AUB) is a common health problem for about 30% of reproductive-age women and is experienced by 15-20% of women attending outpatient gynecology clinics.[1]Currently used classification system of AUB is nomenclature based and characterized by lack of standardized methods for investigation and categorization of potential etiologies, therefore a new classification system had been introduced by the International Federation of Gynecology and Obstetrics (FIGO) in 2011.[2] This classification system is called PALM-COEIN. PALM stands for the pathologies associated with uterine structural anomalies (Polyps, Adenomyosis, Leiomyoma, Malignancy and endometrial hyperplasia), and COEIN stands for the pathologies not associated with uterine structural anomalies (Coagulopathy, Ovulatory dysfunction, Endometrial causes, Iatrogenic, Not yet classified). The PALM-COEIN system classifies uterine

bleeding abnormalities based on a structured evaluation of the patient identifying possible causes or contributors to the symptom. This system was developed because of the non-standardized nature of terminology such as menorrhagia, metrorrhagia, and dysfunctional uterine bleeding, and it does not accept the use of these terms in describing abnormalities in uterine bleeding patterns [3]. The American College of Obstetricians and Gynecologists (ACOG) accepted this classification system in 2012 and recommends its use in the diagnosis and management of AUB cases.4 After initial assessment and stabilization, the etiologies of acute AUB should be classified using the PALM-COEIN system.5,6 Any evaluation of women with AUB should include a through medical history and physical examination, appropriate laboratory and imaging tests, and consideration of age-related factors like adolescence and premenopausal period.[4] The aim of this study is to observe the number of patients coming with complaints of abnormal uterine bleeding in a non-gravid women of different age groups in outpatient clinic of our hospital and their classification as per PALM COEIN method.

MATERIALS AND METHODS

In our hospital OPD setup total patient seen were 1374 out of which 35 patients presented with complaints of abnormal uterine bleeding from 1st August 2016 to 10th Octber 2017.Medical history (including systemic illnesses, drug use, contraception, weight changes, detailed menstrual history),physical examination, routine ultrasound, and any necessary additional imaging techniques were performed.

PALM-COEIN Classification components were defined as follows;

P (polyps): Suspected by ultrasound (hyperechogenic focus or >12 mm endometrial thickening) and diagnosed and treated by hysteroscopy..

A: Adenomyosis was suspected by medical history and ultrasound (asymmetrical myometrial appearance accompanied a large uterus); and diagnosed by magnetic resonance imaging (MRI).

L: Leiomyomas were evaluated and diagnosed by ultrasound. Size, location and existence of endometrial deviations were noted.

M: If malignant/premalignant lesion was suspected, endometrial biopsy was performed by pipelle biopsy or curettage.

C: Coagulopathy was suspected by a structured medical history3,7 and diagnosed by coagulation tests including full blood count, serum ferritin level, prothrombin time (PT), activated partial thromboplastin time (APTT), von Willebrand factor (VWF), factor VII (FVII) levels and liver and kidney function tests.

O: Ovulatory dysfunction was assessed in three sub-categories as endocrinopathies, extremes of reproductive age (adolescence [ages between 13-18] and premenopausal period [ages after 40 to menopause]) and drug usage which were related to dopamine metabolism, steroids and anti-psychotics.

E: Endometrial etiologies included (1) hyperplasia with or without atypia in most of the cases (2) anticoagulant drug usage and (3) endometrial infections. Chlamydial infections were diagnosed by clinical history and cervical examination by speculum. Chlamydial cultures were not performed routinely.

I: Iatrogenic: Etiology included hormonal or any contraceptive pill intake or taking any other drug e.g. anticonvulsants, antibiotics metabolised at liver e.g. rifampicin **N: Not yet classified:** included cases with ANA+, RNP+, history of abdominal koch's or in some cases where no specific cause was found. The term 'abnormal uterine bleeding' describes any departure from any of the four characteristics of menstrual bleeding: frequency of menses (days), regularity of menses (cycle to cycle variation over 12 months), and duration of flow (days), and volume of monthly blood loss (mL). The term amenorrhea was used to describe the absence of menstrual bleeding during a six-month reference interval.[8]

RESULTS

In our hospital OPD setup total patient seen were 1374 out of which 35 patients presented with complaints of abnormal uterine bleeding from 1st August 2017 to 10th February 2018 were included in this study.

Categorized age wise

Less than 20years = 1
20-40years = 7
40-45years = 20
More than 55years = 4
Median age in the study group was 42 years

Categorized as per causes

P = 1
A = 7
L = 8
M = 0
C = 1
O = 7
E = 13
I = 3
N = 2

As observed the most common cause was:
Endometrial (37.14%)
Followed by Leiomyoma (22.85%)
There were 20% of the patients who were having more than one cause.

Category as per marital status and parity

Married = 30
Unmarried = 5
Parous = 29
Nullipara = 6

Categorized as per further management given:

Endometrial biopsy = 3

(OPD pipel biopsy)

D&C = 4

Medical management = 15

MRI = 1

Surgery performed = 12

No treatment = 3

DISCUSSION

The aim in this study was to assess the availability and clinical advantages of the PALMCOEIN classification system. This new FIGO classification system was developed because of the longstanding confusion about terminology and definitions relating to AUB. It was not clear whether terms such as menorrhagia, metrorrhagia, menometrorrhagia, and dysfunctional uterine bleeding referred to symptoms or diagnosis. In addition, these terms did not give information about the etiology of the AUB. This confusion caused difficulties in the management of patients and in the designing of clinical studies about AUB.3 A consistent and universally accepted classification system should be used by clinicians, investigators, and even patients to facilitate communication, clinical care, and research. The PALMCOEIN AUB classification system is the result of several years of collaboration among a wide spectrum of individuals involved in clinical medicine, teaching, and basic and clinical sciences.[9] Beginning with workshops in 2005, contributors from more than 17 countries on six continents developed the PALM-COEIN classification system to determine the causes of AUB in the reproductive years. The basic system comprises nine categories; the first four are defined as visually objective structural criteria (PALM); the second four are unrelated to structural anomalies (COEI); and the final one is reserved for entities that are not yet classified (N). A draft system was developed and revised, distributed for comments, and then discussed at a meeting held in association with the 2009 FIGO World Congress in Cape Town, South Africa.[10] According to the new FIGO classification system, in the absence of structural etiology, the term "dysfunctional uterine bleeding" should be avoided and clinicians should state if AUB is caused by coagulation disorders (AUB-C), ovulation disorders (AUB-O), or endometrial primary dysfunction (AUB-E).[11] The PALMCOEIN system allows clinicians to identify and classify women with AUB and provides reliable information on classification and for comparisons in research settings. Thus, accurate diagnosis and adequate treatment according to the etiology could be possible.[12] When we classified our patients according to the age groups, we noticed that the organic pathologies were increased with increasing age while ovulatory dysfunction was a more common reason for AUB in adolescence. So, detailed history taking for example asking about the body-mass index in patients with younger ages for polycystic ovary syndrome could be possible. This system also provides an approach to AUB in different etiologic reasons and could prevent over-treatment for organic etiologies like leiomyomas while it is not the only reason of the AUB.[13] Since this classification was released, some countries have revised their guidelines for the diagnosis and management of what was formerly called "dysfunctional uterine bleeding" in favor of the new FIGO classification.[14] ACOG recommended the use of the PALM-COEIN classification for both acute and chronic AUB in non-pregnant reproductive-age women.[5]According to the Society of Obstetricians and Gynecologists of Canada, implementing the guideline recommendations will improve the health and well-being of women with abnormal uterine bleeding.[15]

CONCLUSION

In conclusion, PALM-COEIN classification is a practical way of determining the etiology and choosing the appropriate treatment modality in patients with abnormal uterine bleeding in outpatient clinic.

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