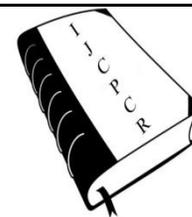




International Journal of
**Current Pharmaceutical & Clinical
Research**



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DISTRIBUTION OF CAUSES AND MANAGEMENT OF ABNORMAL UTERINE BLEEDING

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ABSTRACT

AUB is a bleeding with excess amount, abnormal frequency and duration. It occurs for more than 70% in perimenopausal and postmenopausal women. Prospective observational study was done with a total of 88 cases. Patient's details collected and evaluated the causes and prescription pattern. Leiomyoma was the most common cause of AUB and Tranexamic acid was the most common drug prescribed for AUB and Hysterectomy was done in most of the patients. AUB must be prevented as early as possible to prevent complications.

Key words: Abnormal Uterine Bleeding, Leiomyoma, Hysterectomy, Menorrhagia.

INTRODUCTION

Abnormal uterine bleeding (AUB) is defined as any type of bleeding is not within the normal range of amount, frequency, duration [1]. Abnormal uterine bleeding occurs for more than 70% in perimenopausal and post menopausal women [2]. Acute AUB is a bleeding in woman of reproductive age and require immediate intervention to prevent further blood loss. Chronic AUB is bleeding from uterine corpus with abnormal duration volume or frequency and is present for past 6 month [3]. Menorrhagia is an excessive uterine bleeding more than 7 days [2]. The different causes of AUB based on PALM-COEIN include Polyp, Adenomyosis, Leiomyoma, Malignancy and Hyperplasia, Coagulopathy, Ovulatory disorder, Endometriosis, Iatrogenic, Not classified yet [3]. The goal of therapy for AUB is to reduce blood flow and correct anemia. Progestins used for excessive menstrual bleeding. Shorter course of oral Progestin therapy used for anovulatory uterine bleeding, given for 21 days or months. Continuous release of progesterone provided by Levonorgestrel- releasing intrauterine system reduces AUB. It is better than oral Progestins. NSAIDs reduces prostaglandin levels reduced bleeding, Naproxen sodium, Mefenamic acid reduce flow to 46%-47%. Tranexamic acid is an antifibrinolytic drug prevents activation of

plasminogen [4]. Aim of the study is to analyze the prescription patterns on AUB and to analyze causes of AUB according to PALM-COEIN.

MATERIALS AND METHODS

A prospective observational study was conducted at Karuna medical college Vilayodi, Chittur, Palakkad of Gynecology department. The study was conducted from November 2017 to April 2018. Total 101 was taken only 88 came for follow up.

Inclusion criteria

Patients of reproductive, perimenopausal and post menopausal age, patients with excessive bleeding of prolonged duration, patients using contraceptive device in the preceding 3 months.

Exclusion criteria

Pregnant women, patients with cervical cause for vaginal bleeding, patients with local lesions on vagina and vulva, patient with pelvic infection, genital prolapse and PID.

Study procedure

Data entry form was prepared with patient's age,

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parity, medical history, weight, USG results, treatment. Cases were collected into data entry form and analysed the causes of AUB and prescription patterns of AUB.

RESULTS AND DISCUSSION

There were 71 inpatient cases and 17 outpatient cases, since many patients need surgery thus more inpatient cases. Perimenopause is a menopausal transition. It is the interval in which women’s body undergo a natural shift to more or less cycle of ovulation and menstruation towards permanent infertility [6]. In similar studies it shows >50% woman have AUB at >40 years of age [5]. In this study 33 patients found to have AUB at ages 36-45 and also >45 years also had 33 patients with percentage 37.5% for both age groups thus majority of the patients comes under these age groups. 26-35 aged patients are 15 with 17.04% and 16-25 aged patients are 7 in number .

43 patients have normal BMI and accounts for 48.8% of total cases. 23 patients have overweight with 26.1% .12 patients are obese with 13.6%. Only 10 patients are underweight with 11.3% shown in table 1.

Obese patients have excessive adipose tissue which increases peripheral aromatization of androstenedione to estrone. Elevated estrone leads to abnormal feedback in hypothalamus pituitary axis can cause oligo or anovulation [3].

Various journals show that multiparous women have high chances of adenomyosis. Pregnancy leads to formation of endometrium and extend to myometrium. Adenomyotic tissues have more estrogen receptors [3]. Table 2 shows parity (children) of patients with AUB.

AUB is classified into Acute, Sub acute , Chronic

which was developed by Indian Guidelines with recommendation of good clinical practice which helps to diagnose and manage AUB and FIGO gave this classification on 2011 [7]. Table 3 shows the classification of AUB.

Menorrhagia was found to be most common symptom of AUB. Ridhi Kathiria et al shows 46% of cases with menorrhagia whereas in my study it 56.8%.⁸ table 4 shows the various symptoms of AUB.

Incidence of fibroids increases with age. Women with fibroids have heavy bleeding since the endometrial surface area is increased. Hyperestrogenemia causes endometrial hyperplasia, thus fragile and engorged vasculature was present in the perimyoma tissue release angiogenic factors like vascular endothelial growth factors and platelet derived growth factors impair local endometrial hemostasis [3, 9]. Table 5 shows Distribution of causes of AUB

USG examination helps to estimate Polyp, Adenomyosis, Leiomyoma, Malignancy and Hyperplasia, Endometriosis, Ovulatory disorder and patient under medication of anticoagulant, Copper T helps us to analyze Coagulopathy or Iatrogenic respectively. Tranexamic acid, antifibrinolytics agent was prescribed the most for this study. Kristen.A Matterson ,MD et al done study on December 2014, 7 underwent blood transfusion, 20 with Iron supplement, 16 with NSAIDs , 92 with hormonal therapy and 31 surgery [11]. Table 6 shows the different treatment for AUB.

Dr Astha Saheta et al done study on 2014, 37% had hysterectomy, 29% underwent D&C , 16% Aprotomy and 18% hormonal treatment [10]. In this study table 7 shows various surgeries done .

Table 1. Body mass index of patients with AUB

BMI (kg/m ²)	Number of patients n=88	Percentage
Underweight (<18.5)	10	11.3%
Normal (18.5-24.9)	43	48.8%
Overweight (25-29.5)	23	26.1%
Obese (>29.5)	12	13.6%

Table 2. Parity of patients with AUB

Parity	Number of patients n=88	Percentage
0	24	27.2%
1	6	6.8%
2	37	42.04%
3	16	18.1%
>3	5	5.6%

Table 3. Classification of AUB

Duration of bleeding	Number of patients n=88	Percentage
Mild(<6 months)	47	53.4%
Moderate(6-12 months)	25	28.4%
Severe(>12 months)	16	18.1%

Table 4. Symptoms of AUB

Chief complaints	Number of patients n=88	Percentage
Menorrhagia	50	56.8%
Amenorrhea	18	20.4%
Metrorrhagia	2	2.2%
Menometrorrhagia	15	17.04%
Polymenorrhea	3	3.4%
Oligomenorrhea	0	0%

Table 5. Distribution of causes of AUB according to PALM-COEIN classification

Causes of AUB	Number of patients(n=88)	Percentage
Polyp	4	4.5%
Adenomyosis	17	19.3%
Leiomyoma	18	20.4%
Malignancy	0	0 %
Coagulopathy	0	0 %
Ovulatory disorder	18	20.4%
Endometrial disorder	12	13.6%
Iatrogenic	0	0 %
Not classified yet	1	1.1%
Polyp+ leiomyoma	1	1.1%
Adenomyosis+ leiomyoma	8	9.09%
Malignancy+ leiomyoma	1	1.1%
Coagulopathy+ leiomyoma	2	2.2%
Iatrogenic+ leiomyoma	6	6.8%

Table 6. Prescription pattern of AUB

Drugs	Number of patients(n=88)	Percentage
NSAIDs	23	26.13%
Antifibrinolytics	25	28.4%
Hormones	9	10.2%
Iron supplements	16	18.18%
Supplements+ antifibrinolytics	6	6.8%
Supplements+ NSAIDs	4	4.5%
NSAIDs + antifibrinolytics	3	3.4%
Supplements+ hormones	2	2.2%

Table 7. Surgery underwent for AUB

Treatment	Number of patients n=88	Percentage
Hysterectomy	27	30.6%
Polypectomy	17	19.3%
Cystectomy	2	2.2%
Dilatation and Curettage	5	5.6%
Only Drugs without surgery	37	42.04%

CONCLUSION

AUB is a common problem which has an impact on women's daily activities. It is therefore recommended that awareness campaigns about the etiology and modality of treatment of the condition should be done. Perimenopausal and post menopausal women are seen with AUB in this study. Menorrhagia was the most common symptom in this study Leiomyoma was the most common cause of AUB , diagnose and treat as soon as possible it

can lead to malignancy, severe anemia and endometrial hyperplasia. In this study antifibrinolytics was prescribed the most and hysterectomy was done in many patients.

ACKNOWLEDGEMENT

I would like to thank Dr Nadira Banu, MD gynecology department, Karuna Medical College , Vilayodi , Chittur, Palakkad , Grace college of Pharmacy, Palakkad and all the patients participated in the study.

CONFLICT OF INTEREST

No interest

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