The Egyptian Journal of Hospital Medicine (January 2018) Vol. 70 (5), Page 762-765

Abnormal Uterine Bleeding in Women in Child Bearing Period of Arar City, Northern Saudi Arabia

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ABSTRACT

Background: Abnormal uterine bleeding (AUB) affects as many as one-third of reproductive-aged women. Women with AUB may experience pain, embarrassment and inconvenience that can have a significant impact on their lives. This study was carried out **aiming** to assess the pattern and possible causes of abnormal uterine bleeding in reproductive aged women in Arar city, Northern Saudi Arabia. **Methods**: The study was conducted at Maternal and Child Hospital of Arar City, during the period from 1/5/2017 to 30/7/2017. Data collected by personal interview with cases and filling a pre-designed online questionnaire. Collected data was coded and analyzed using statistical package for the social sciences (SPSS, version 16). Descriptive statistics for the quantitative and qualitative variables were used. **Results:** In our study 100 women were included, with mean age 30.5±6.9, mean age of menarche was 13.1 (±1.8) and 52% of them had regular menses. Pattern of bleeding was menorrhagia in 52%. The cause of bleeding was dysfunctional uterine bleeding in 59% of cases, Intrauterine device complications in14%, Uterine fibroid in 12% of cases and contraceptive pills complications in 15%. Only 13% of them treated surgically while 87.0% treated medically. **Conclusion:** The most common cause of abnormal uterine bleeding was endometrial hyperplasia (in 59%), and the contraceptive pills complications comes in the second place (in 15%), then the Intrauterine device complications (in 14%) and the uterine fibroid (in 12%). Health education sittings is recommended to increase the public awareness about the causes and importance of seeking medical care during AUB attacks specially in premenopausal period.

Keywords: Abnormal uterine bleeding; Child bearing period; Arar City; Saudi Arabia.

INTRODUCTION

Abnormal uterine bleeding affects as many as one-third of reproductive-aged women[1]**.** Indeed, women of reproductive age are much more frequently affected by AUB than premenarchal or menopausal women [2]. There are many types of abnormal uterine bleeding according to amount, duration or timing of bleeding , and it can be acute or chronic [3]. About 9%-46% of women report AUB during their life [4, 5]. Not surprisingly, women with AUB report a significantly poorer quality of life when compared to unaffected women of similar ages [6]. Such bleeding can occur as normal physiological event in adolescents establishing menses and women experiencing perimenopause, or it can be as pathological problem in case of any bleeding with excessive duration, frequency, and amount in pre and postmenopausal women.

AUB could be due to several reasons such as organic (endometrial polyps, hyperplasia, myomas, atrophy, endometrial cancer or ectopic pregnancy) or non-organic causes (dysfunctional uterine bleeding) [7]. It's called chronic AUB when the bleeding from the uterine corpus that's abnormal in volume, regularity or timing has been present for the majority of the last 6 months [8]. As AUB has direct impact on women live as they complain from pain, inconvenience and ritualistic behavior, it although had effect on the cost of economy and health service [10]. AUS study reported financial losses annually of >$200 per patient due to work absence and home management costs [11]. AUB is common in developing countries as they are in developed countries, and that when services are available, this will prompt women in developing countries to seek care for them [12], and many of girl are suffering from lack of information or no information about AUB [13].

The report of Houston et al. showed that twice many African-American adolescents compared with Caucasian teens felt un prepared and didn't receive information about menarche [14].

AIM OF THE STUDY

To assess the pattern and possible causes of abnormal uterine bleeding in reproductive aged women in Arar city, Northern Saudi Arabia.

MATERIALS AND METHODS

This study was conducted at Maternal and child hospital of Arar City, Obstetrics and Gynecology department during the period from 1/5/2017 to 30/7/2017. The study included 100 patients in child

Received: 26/11/2017
Accepted: 06/12/2017
DOI: 10.12816/0043979

bearing period admitted or attended to the outpatient clinic complaining of abnormal uterine bleeding.

Study design

A cross-sectional study was conducted at Maternal and child hospital of Arar City, Obstetrics and Gynecology department. Data collected by personal interview with cases and filling a pre-designed online questionnaire after a brief introduction or explanation of the idea of the research. The questionnaire included the relevant questions to collect data about:

- Socio-demographic characteristics of the participants including age, marital status and educational status
- Past medical, obstetric and surgical history as, history of chronic diseases, smoking, continuous drug intake, parity, history of abortion, previous gynecologic operation and using of contraceptive methods.
- Menstrual history: Age at menarche, regularity of menses, history of abnormal uterine bleeding, period of bleeding, pattern of bleeding, cause of bleeding (diagnoses after investigations), type of management.

Statistical analysis

Collected data was coded and analyzed using statistical package for the social sciences (SPSS, version 15). Descriptive statistics for the prevalence and quantitative variables was used.

Ethical considerations

This study was reviewed and approved by the Research Ethics Committee of Faculty of Medicine, Northern Border University. Participants were informed that participation is completely voluntary and data collectors introduced and explained the research to participants. No names were recorded on the questionnaires and all questionnaires kept safe.

RESULTS

Table (1): illustrates the sociodemographic characteristics of the studied women. About half (53%) of them aged 20-30 years. Majority (60%) of them reached university level of education, about quarter (26%) get in work and 65% were married. Regarding the educational level of there husbands, we found that 36% of them had university education. About age of marriage, 21% were married at age 20-30 years; the economic status was moderate in 69% of them.

Table (2) illustrates the past medical, obstetric and surgical history of studied women. We found that about 79% of them free from chronic disease, 72% didn't use any drugs. 92% wasn't smokers. About previous gynecological operations, 66% said "No", only 29% of them had history of abortion and 46% use different contraceptive method.

Table (3) shows the menstrual history of the studied women. We found that 86% of them get menarche at 10-15 years old with mean (±SD) age of menarche 13.1 (±1.8) and 52% of them had regular menses.

Table (4) shows abnormal uterine bleeding-related characteristics in studied women. All of the studied women had history of abnormal uterine bleeding, the bleeding last 5 days in 35% of them, it was menorrhagia in 52% of them, 70% only of them seek medical care, only 13% of them treated surgically while 87.0% treated medically. The cause of bleeding was dysfunctional uterine bleeding in 59% of them, uterine fibroid in 12.0%, intrauterine device (loop insertion) complications in 14% and contraceptive pills complications in 15%.

Table (1): sociodemographic characteristics of the studied women, Arar, 2017

Age group	Frequency	Percent
1. >20	19	19.0
2. 20-	53	53.0
3. 30-	17	17.0
4. 40+	11	11.0
Mean age (±SD) = 30.5±6.9,		
Educational level		
5. Illiterate	1	1.0
6. Primary	4	4.0
7. Preparatory	9	9.0
8. Secondary	25	25.0
9. University +	62	62.0
Working status		
10. House wife	74	74.0
11. Working	26	26.0
Marital status		
12. Single	35	35.0
13. Married	65	65.0
Educational level of the husband		
14. Illiterate	26	26.0
15. Primary	7	7.0
16. Preparatory	4	4.0
17. Secondary	27	27.0
18. University+	36	36.0
Economic status		
19. Low	15	15.0
20. Moderate	69	69.0
21. High	16	16.0
Age at marriage		
22. <20	23	23.0
23. 20-	31	31.0
24. 30+	11	11.0
25. Still single	35	35.0

Table (2): Past medical, obstetric and surgical history of the studied women, Arar, 2017

Chronic diseases	No.	%
26. No	**79**	**79.0**
27. Yes	**21**	**21.0**
Continuous drug intake		
28. No	**72**	**72.0**
29. Yes	**28**	**28.0**
Smoking		
30. No	**92**	**92.0**
31. Yes	**8**	**8.0**
Previous gynecologic or obstetric operation		
32. No	**66**	**66.0**
33. Yes	**34**	**34.0**
History of abortion		
34. No	**71**	**71.0**
35. Yes	**29**	**29.0**
Using of contraceptive methods		
36. No	**54**	**54.0**
37. Yes	**46**	**46.0**

Table (3): Menstrual history of the studied women, Arar, 2017

Age at menarche	No.	
38. < 10	4	4.0
39. 10-	86	86.0
40. 15-	9	9.0
41. 20+	1	1.0
Mean (±SD) age of menarche	**13.1 (±1.8)**	
Regularity of menses		
42. No	48	48.0
43. Yes	52	52.0

Table (4): Abnormal uterine bleeding-related characteristics in the studied women, Arar, 2017

	No.	%
History of abnormal uterine bleeding		
Yes	100	100.0
Period of bleeding (in days)		
1-	34	34.0
3-	31	31.0
5+	35	35.0
Pattern of abnormal uterine bleeding		
Menorrhagia	52	52.0
Metrorrhagia	26	26.0
Menometrorrhagia	22	22.0
Seeking medical advice		
No	30	30.0
Yes	70	70.0
Type of management		
Medical	87	87.0
Surgical	13	13.0
Cause of bleeding (diagnoses after investigations)		
Contraceptive pills complications	15	15.0
Intrauterine device (loop insertion) complications	14	14.0
Uterine fibroid	12	12.0
Dysfunctional uterine bleeding	59	59.0

DISCUSSION

AUB can be further categorized into more specific terminology depending on the timing and volume of bleeding. Women with AUB may experience pain, embarrassment, inconvenience, and ritualistic behavior to avoid social embarrassment that can have a significant impact on their lives [1].

This study was carried out to assess the pattern and possible causes and type of treatment of abnormal uterine bleeding in reproductive aged women in Arar city, Northern Saudi Arabia.

This study was conducted at Maternal and child hospital of Arar City, Obstetrics and Gynecology department during the period from 1/5/2017 to 30/7/2017. The study included patients admitted or attended to the outpatient clinic complaining of abnormal uterine bleeding.

In our study one hundred women were included, of these 70.0% were from 20 to 40 years and only 11% were above 40 years old. The cause of bleeding which was found after investigations and diagnoses were dysfunctional uterine bleeding in 59% of cases, contraceptive pills complications in 15%, intrauterine device (loop insertion) complications in14% and uterine fibroid in 12% of cases.

In a study carried out in Upper Egypt, they found that the main pathological lesion of premenopausal group was fibroid in 22%, followed by poly cystic ovary (PCO) in 15%, adenomyosis in 8%, simple ovarian cyst in 9% and finally complicated ovarian cyst in 2% , while no abnormality detected in 44% [16]. In other study by Dan Galg [17] (42%) had fibroid and (6%) had adenomyosis.

In the current study, 70% of the cases asked medical care, 87% got medical and 13% got surgical treatment. In our study, the majority of the cases reached menarche at the range of 10–15 years with mean age of menarche 13.1 ±1.8 while in UK, girls enter puberty around the age of 10 years with a median age at menarche of 12.9 years [18], and in Italy, the mean age at menarche was 12.4 ± 1.3 years [19, 20].

In the present study, 52% of the studied women had regular menses and 48% complained from irregular menses. Karout et al. [21] reported that, the prevalence of irregular menstruation was 59.4% of their participants. Unlike to other studies which reported that the average incidence of irregular menses was noted to be 5–24% [19, 22, 23, 24].

In the current study, Menorrhagia was found in 52% of cases. In Gad study [25], menorrhagia was the most common among the studied group (47.0%) which is in accordance with our figure.

CONCLUSION AND RECOMMENDATIONS

The most common cause of abnormal uterine bleeding was dysfunctional uterine bleeding (59%), contraceptive pills complications comes in the second place (15%), intrauterine device complications (14%) and the uterine fibroid in (12%). The medical management had the upper hand between our cases; as 87% of the total had medical management and only 13% had surgical interference. Health education sittings is recommended to increase the public awareness about the causes and importance of seeking medical care during AUB attacks specially in premenopausal period. Further in depth researches is recommended.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest.

ACKNOWLEDGMENT

The success and outcome of this work required support and assistance of many people and we are fortunate to have this all along the completion of the work. Our thanks go to Afaf Shuaib Badi Albaqawi (Medical Intern, Northern Border University), Hassan Ali Y Al Dehneen (Medical Intern, Imam Abdulrahman Bin Faisal University) and Islam Ahmed Mohamed Azab for their help in different steps of the research.

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