Original Article

Abnormal Uterine Bleeding

Etio-Pathological Profile of Abnormal Uterine Bleeding in Abbottabad

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ABSTRACT

Objective: To determine the etiology and clinical profile of patients with abnormal uterine bleeding,
Study Design: Observational / descriptive study,
Place and Duration of Study: This study was conducted at the Shahina Jamil Teaching Hospital, Abbottabad from September 2014 to February 2016,
Materials and Methods: Patients who were not pregnant, among the age of 20-60 years and had history of abnormal menstruation were included. Exclusion criteria included patients who were pregnant, less than 20 years or greater than 60 years, or suffering from cancer. Epidemiological data was noted and detailed history was taken especially about menses, vaginal discharge, use of drugs, hormonal treatment including oral contraceptive pills and any method of contraception used. Physical, ultrasonographic examination and histopathological examination of endometrium was performed in all patients.
Results: There were 200 patients enrolled in this study. Their mean age was 38±5 years. Majority of them were between the age of 31-40 years, (82 patients) and 41-50 years, (66 patients).About 150 patients had menstrual irregularities. Eighty of these patients had menorrhagia while seventy had polymenorrhagia. Fifty patients had history of vaginal bleeding. Contraceptive measures were used by 38 patients. Out of which, OCPs were the preferred mode of contraception used. Twenty two patients had infertility with 16 had primary while 6 had secondary infertility. Sixty two patients had abnormal ultrasound examination. The chief ultrasonographic abnormality was that of uterine fibroid, ovarian cyst and ovarian cancer. On endometrial examination, 168 patients had normal physiological changes. The predominant change in this group was that of proliferative and secretory changes. Twenty patients had abnormal physiological endometrial changes. The chief abnormalities found were that of Pill endometrium, (12 patients) and irregular shedding, (4 patients). Preneoplastic and inflammatory changes were observed in six patients in each group.
Conclusion: AUB is one of the commonest gynecological disorders. The underlying cause can be determined by meticulous work-up in these patients which can help in deciding optimal treatment option for AUB patients. This, in turn, will not only improve health and well-being of these patients but as well as improve their quality of life. Endometrial sampling plays an important role in the diagnostic work-up of AUB. Therefore, it should be offered to all such patients as part of their evaluation.
Key Words: Abnormal uterine bleeding, menorrhagia

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INTRODUCTION

Abnormal uterine bleeding (AUB) is major cause of gynecological consultation in females of childbearing age.[1] About 19.1 % gynecologist'sconsultation were because of the menstrual disorders and about 30% of sexually active women are affected by menorrhagia.[2, 3]Likewise, AUB was the chief cause of gynecological surgeries in 25% of the patients and AUB was accountable for two-third of all hysterectomies.[4, 5]

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The estimated total costs (both direct and indirect) related to AUB were 01 and 1.2 billion US dollars representing higher economic costs associated with AUB.[5]

AUB is associated with alteration in the normal female menstrual cycle. This alteration would be in frequency or duration of menstrual cycle oralteration in duration and amount of flow.[3] Women of any age group can be affected by AUB and this disease can present in different ways. Etiology of AUBis multi-factorial: physiological, organic, systemic and hormonal causes, e.g. endometrial hyperplasia, endometrial polyp, or endometrial carcinoma, pelvic inflammatory disease, adenomyosis, ovarian cancer, pituitary, adrenal, hepatic,thyroid diseases or inherited coagulopathies like von Willebrand disease, can lead to AUB.[2, 3]Careful work-up of patient can reveal the cause of AUB in upto 60% of cases.[1] Nevertheless, there are many patients in which cause of AUB cannot be found despite meticulous evaluation. A term dysfunctional uterine bleeding (DUB) is used to characterize such patients.[3]

The successful treatment ofsuch patients relyon ascertainingand treating the underlying cause of AUB where possible so that normal rhythm of menstrual cycle can be restored. The management of AUB comprises of both medical or surgical options based on the underlying cause.[3]

AUB has impact on woman's emotional, psychosocial well-being and their quality of life. Too much loss of blood reduces iron from the body and which in turn, causes iron deficiency anemia. It manifests as weakness and fatigue, mood changes and weight loss and impairs the quality of life of the patient.[6] Also, the sexual life of a women is also affected by AUB as well as absenteeism from work leads to loss of productive hours.[5] Therefore, AUB exerts multi-factorial effects on the health and well-being of a patient. This study is performed to determine the etiology and clinical features of patients suffering from AUB in our area.

MATERIALS AND METHODS

This descriptive study was performed at Shahina Jamil Teaching Hospital, Abbottabad from September 2014 to February 2016.

Patients who were not pregnant, among the age of 20-60 years and had history of abnormal menstruation were included. Exclusion criteria included patients who were pregnant, less than 20 years or greater than 60 years, or suffering from cancer. After taking informed consent, epidemiological data was noted. Detailed history was taken especially about menses, vaginal discharge, use of drugs, hormonal treatment including oral contraceptive pills (OCPs) and any method of contraception used. Physical, ultrasonographic (USG) examination and histopathological examination of endometrium was performed in all patients. SPSS (version 17) was used to perform statistical analysis.

RESULTS

There were 200 patients enrolled in this study. Their mean age was 38±5 years. Majority of themwere between the age of 31-40 years, (82 patients) and 41-50 years, (66 patients),(Figure 1).

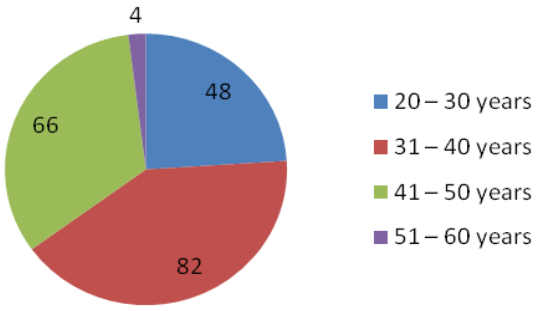

Figure No.1. Age-wise distribution of patients, (n=200)

About 150 patients had menstrual irregularities. Eighty of these patients had menorrhagia while seventy had polymenorrhagia. Fifty patients had history of vaginal bleeding, (Table 1).Contraceptive measures were used by 38 patients. Out of which, OCPs were the preferred modeof contraception used. Twenty two patients had infertility. Among these, 16 had primary while 6 had secondary infertility, (Table 1).

Table No.1: Clinical profile of AUB patients, (n=200)

Variable	No, (%age)
Chief presenting complaints	
Menorrhagia	80, 40%
Polymenorrhagia	70, 35%
Vaginal bleeding	50, 25%
Total	200, 100%
Contraception use	38, 19%
1. Oral contraceptive pills	22, 11%
2. Intra uterine contraceptive device	8, 4%
3. Bilateral tubal ligation	8, 4%
Infertility	22, 11%
1. Primary infertility	16, 8%
2. Secondary infertility	6, 3%
Non-significant	140, 70%
Total	200, 100%

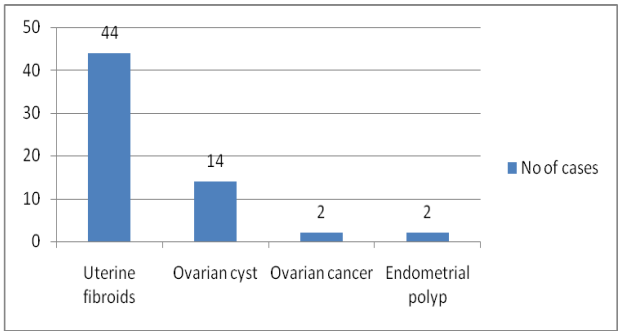

Figure No.2. Ultrasonographic abnormalities in AUB patients, (n=62)

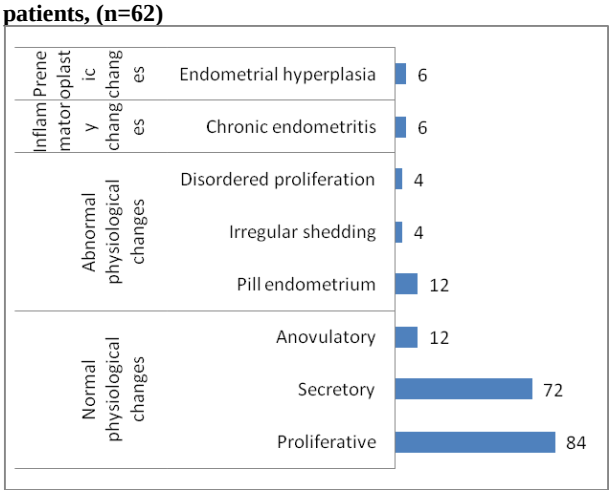

Figure No.3: Endometrial changes onhisto-pathological examination in AUB patients, (n=200)

Sixty two patients had abnormal ultrasound examination. The chief ultrasonographic abnormality

was: uterine fibroid, ovarian cyst, ovarian cancer and endometrial polyps, (Figure 2).

On endometrial examination, 168 patients had normal physiological changes. The predominant change in this group was that of proliferative changes observed in 84 patients while secretory changes in 72 patients. Twenty patients had abnormal physiological endometrial changes. The chief abnormalities found were that of Pill endometrium, (12 patients) and irregular shedding, (4 patients). Preneoplastic and inflammatory changes were observed in six patients in each group, (Figure 3).

DISCUSSION

AUB is one of the most prevalent disease affecting women. It is characterized by alteration in the flow and the frequency of menstrual cycle. Underlying cause can be determined in most of patients by detailed assessment. But, there are certain cases in which cause cannot be found. Such patients were said to have DUB. Management strategies for AUB comprise of medical (including hormones) and surgical choices but medical management is the number one mode of treatment. Surgical management is generally used for those patients who do not intend to procreate or in whom other management strategies have failed.[2, 5]

In this study, the majority of cases, (41%), were between the age of 31 to 40 years and their mean age was 38±5. This finding corroborate with findings of other studies. A study done on Indian patients by Mahapatra and Mishra stated that the majority of their cases, (45.7%), were between the age of 31-40 years.[3] Likewise, Rehana et al have demonstrated that the majority of their Indian patients, (32.5%), were between 30-39 years of age which means that this age group is preferentially affected.[7]

Most of our patients presented with complaints of menorrhagia, (40%), and polymenorrhagia (35%). Nargis et alhave stated that the chief presenting complaint of Bangladeshi women were menorrhagia (52.6%) and polymenorrhagia (24.6%) in their study.[8] Similarly, Mahapatra and Mishra have stated that the occurrence of menorrhagia and polymenorrhagiaamong their patients were 48.60% and 17.10% respectively while their incidence was 55.8% and 6.6% respectively according to Rehana et al.[3,7] This discrepancy in the frequency of these symptoms could be due to the fact that they were assessed subjectively by asking questions from the patient. Objective or rather semi-objective assessment methods should be employed to preciselymeasure the amount of blood loss as objective methods are unpractical and expensive.[5]

Our study has shown a very interesting finding that 19% of our patients used contraception. Majority of the cases, 11%, preferred OCPs. In patients with AUB, they would be preferred as a method of contraception if they need contraception. It is because, they provide an added advantage in AUB patients if used as contraception as they benefit their disease and serve as contraceptivecon currently.[5, 9]

The predominant endometrial change found on histopathological examination in our study was that of proliferative endometrium in 42% cases and secretory endometrium in 36% cases. These results are comparable to other studies. According to Mahapatra and Mishra, the frequency of proliferative, secretory and hyperplastic endometrial changes were 45.7%,30% and 12.1% respectively in their Indian subjects.[3] Similarly, Nargis et al have reported that the rate of proliferative, secretory and hyperplastic endometrium was 62.03%,20.32% and 14.43% respectively in their study which was conducted in Bangladesh.[8]The inflammatory andhyperplastic changes were observed in the endometrium of 3% of patients, in each group. Comparable to our study, in their study conducted in Nepal, Baral et al stated that the occurrence of inflammatory lesions were 2.7%.[10] This indicates that proliferative and secretory endometrial changes are the principal change observed in our study.

CONCLUSION

AUB is one of the commonest gynecological disorders. The underlying cause can be determined by meticulous work-up in these patients which can help in deciding optimal treatment option for AUB patients. This, in turn, will not only improve health and well-being of these patients but as well as improve their quality of life. Endometrial sampling plays an important role in the diagnostic work-up of AUB. Therefore, it should be offered to all such patients as part of their evaluation.

Conflict of Interest: The study has no conflict of interest to declare by any author.

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