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Clinicopathological Evaluation of Abnormal Uterine Bleeding and its Management in a Tertiary Care Centre

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Abstract: ***Menstrual disturbance is one of the most common gynecological problems especially in the perimenopausal age group. During reproductive age group, about 9-30% of women suffer from abnormal uterine bleeding and its incidence increases as the age advances. There is wide range of causes of AUB and identification of causative factor is the key to successful clinical management. For treatment of AUB hormonal therapy has become the mainstay of treatment. The objective of our study is to study the clinicopathological evaluation and management of AUB. Methods: This was a prospective study done on patients presenting with AUB. This study was carried out from November 2018 to November 2019 in S.M.G.S hospital, GMC Jammu. All the outdoor and indoor patients presenting with abnormal uterine bleeding were taken. The patients who were pregnant and have bleeding were excluded from the study. Patients who were selected subjected to complete history, clinical examination, laboratory investigation and ultrasonography. Other investigations in the form of hysteroscopy and laparoscopy was also done in some selected patients. Specimen for biopsy was collected and then sent for histopathological study. Finally treatment according to the cause was given. The age, parity and bleeding pattern were noted and clinical diagnosis along with findings on ultrasonography, hysteroscopy, laparoscopy and histopathology were analyzed. Results: A total of 89 cases with age group ranging from 20-70 years were included in the study. Most of the patients were seen in the age group of 41-50 (41.57%) with heavy menstrual bleeding being the main presenting complaint. It was observed that dysfunctional uterine bleeding was the most common cause in age group of 40-50 years but endometrial carcinoma was the main cause of bleeding above the age of 50 years indicating increased occurrence of malignancy with advancing age. Conclusion: Although the incidence of benign lesions is more in cases of AUB possibility of endometrial Ca must be considered. Therefore role of endometrial biopsy is very important in cases of AUB especially in perimenopausal and postmenopausal age group. Conservative treatment should be started first if clinically appropriate to minimize the frequency of hysterectomy and risk associated with them.***

Keywords: Abnormal uterine bleeding, DUB, Perimenopause, Medical treatment

1. Introduction

Abnormal uterine bleeding (AUB) is one of the most common gynecological problem. AUB may be defined as any variation from the normal menstrual cycle, including alteration in its regularity, frequency of menses, duration of flow, and amount of blood loss. AUB can occur at any age in various forms and has different modes of presentation. Abnormal uterine bleeding during reproductive age have broad spectrum of causes ranging from physiological process to malignant lesions. Various causes can be classified by acronym PALM-COEIN i.e. P (Polyp), A (Adenomyosis), L (leiomyoma), M (Malignancy), C (coagulopathy), O (ovulatory), E (endometrial), I (iatrogenic), N (not specified). PALM is for organic causes and COEIN is for inorganic causes. When AUB occurs without any systemic causes or any organic lesions of the genital tract, the term dysfunctional uterine bleeding is used. AUB interferes with a woman's physical, emotional, social quality of life. Severity of symptoms may vary from mild increased volume, duration or frequency of bleeding to severe anaemia and some time may need hysterectomy. In many cases, the symptoms may be relatively minor and related to self-limiting alterations in normal physiology. The first aim of the clinician is to reverse the abnormality and induce or restore the cyclic predictable menses of normal volume and duration. This can be achieved by complete history, thorough clinical examination, ultrasonography or hysteroscopy and histopathological examination to reach the diagnosis. Because successful clinical management depends on recognization or identification of the causative factors responsible. When no systemic and pelvic cause is evident to clinician, histopathological examination remains the only alternative to reach the diagnosis.

Treatment options vary from non hormonal, hormonal to surgical management. Various Options include intravenous conjugated equine estrogen, combined oral contraception, oral progestins and trexanamic acid. Hormonal treatment has become the mainstay of treatment for DUB. Depending upon the cause, severity of symptoms, wish to preserve fertility, underlying medical condition and availability of options decision for type of treatment is made. Medical management should be the initial management for most patients if clinically appropriate. In case of patients not responding to medical treatment hysterectomy can be done as a definitive procedure.

2. Aims and Objectives

To study the clinicopathological evaluation and management of AUB.

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3. Materials and Methods

This study was done in S.M.G.S hospital, GMC Jammu over a period of 1 years from November 2018 to November 2019. In this study 89 cases of 20-70 years of age group were randomly selected. All the outdoor and indoor patients presenting with abnormal uterine bleeding were included in the study. The patients who were pregnant and have bleeding were excluded from the study. Patients who were selected subjected to complete history, clinical examination, laboratory investigation, ultrasonography and hysteroscopy or laparoscopy in some selected patients. Specimen for biopsy was collected which was then sent for histopathological study. Treatment given according to the final diagnosis. All the findings and the histopathological reports were then assembled and analyzed.

4. Results

Table 1: Distribution of patients according to age (n=89)

Age	No. of cases	Percentage
20 to 30	9	10.11
31 to 40	32	35.95
41 to 50	37	41.57
>50	11	12.35

Most of the patients of AUB were in the age group of 41 to 50 years (41.57%). Most of the cases of AUB were multiparous (70%) followed by primiparous in 28% and nulliparous in 2%. Majority of the patients had low socioeconomic status (68%).

Table 2: Distribution of patients according to symptoms (n=89)

Bleeding types	No. of women	Percentage
Heavy menstrual bleeding	39	43.82
Frequent & heavy menstrual bleeding	5	5.62
Frequent cycle	3	3.37
Postmenopausal bleeding	16	17.97
Irregular bleeding	14	15.73
Irregular & heavy menstrual bleeding	8	8.99
Prolong period	3	3.37
Intermenstrual bleeding	1	1.12

Heavy menstrual bleeding was the most common symptoms (43.82%) with which patient presented to hospital.

Table 3: Distribution of patients according to histopathological findings (n=89)

Type of endometrium	No. of patients	Percentage
Proliferative Endometrium	35	39.32
Secretory Endometrium	15	16.85
Endometrial Atrophy	3	3.37
Endocervical polyp	3	3.37
Chronic inflammatory endometrium	1	1.12
Hydatiform mole	1	1.12
Endometrial Hyperplasia	14	15.73
Endometrial polyp	7	7.87
Endometrial hyperplasia with endocervical polyp	1	1.12
Calcified products	2	2.24
Cervical dysplasia	1	1.12
Cervical cancer	1	1.12
Ca Endometrium	3	3.37
Ovarian cancer	1	1.12
RPOCs	1	1.12

On Histopathology normal physiological phase as proliferative and secretary endometrium was the most common finding (56.17%). Common pathology was hyperplasia (15.73%). Simple cystic hyperplasia was most common (85.17%), complex hyperplasia and atypical hyperplasia was seen in 7.14% of patients. Among malignancies endometrial cancer was seen in 2.24%, cervical cancer in 2.24% and ovarian cancer was seen in 1.12% of cases. All cases of endometrial atrophy and malignancies were in the postmenopausal age group. There were 5 cases of fibroid uterus (5.61%), 1 case of adenomyosis (1.12%) and 3 cases of endometriosis (3.37%) which appeared as normal endometrium on histopathology. Rest of the diagnosis made by clinical diagnosis, examination and hysteroscopy were almost correlated with histopathology.

As far as treatment is concerned, hormonal therapy was used as the mainstay of treatment. 88% were responsive to the treatment. All cases of fibroid uterus and adenomyosis underwent hysterectomy. In most patients of DUB treatment in the form of combined hormonal or cyclic progestin therapy or Mirena IUCD was used, only 12% patients showed failed response and hysterectomy was done later on. All cases of endometrial hyperplasia were treated by cyclic progestins except in a case of atypical hyperplasia where hysterectomy was done. There were 3 cases of endometrial atrophy, all these were postmenopausal and underwent hysterectomy because of repeated postmenopausal bleeding. Endometrial polyp and endocervical polyp were removed by polypectomy and calcified products were hysteroscopically removed. There was 1 case of complete hydatiform mole which was in perimenopausal age, 3 cases of endometrial cancer, 1 case of severe cervical dysplasia, all these were treated by hysterectomy. Wertheim hysterectomy was done in cervical cancer which was in stage 1b. Radical hysterectomy was done in a case of ovarian cancer.

5. Discussion

AUB is one of the most frequently encountered condition in gynecology all over the world. The diagnosis of AUB was mostly based on patient symptoms and clinical findings. Ultrasonography (Abdominal Ultrasonography or TVS), hysteroscopy and laparoscopy was also used as investigational modality where required besides laboratory investigations.

This study showed that the majority of women were in the age group of 41-50 years (41.57%) where as in study by Sudhami S et al 65% women were in age group 40-45 years. This suggests that frequency of heavy menstrual bleeding is more with increasing age. Most cases were multiparous women which is similar to study conducted by Zarawar MP et al., Archana B et al. and Lotha L et al, Sreelakshmi U et al. This suggests that abnormal uterine bleeding is associated with increased parity. Heavy menstrual bleeding was the most common presenting symptoms which was also seen by Sarawat A et al, Arti R et al, Lotha L et al and Talukdar B et

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al. Most common organic cause of AUB was fibroid followed by DUB which was also found by Lotha L et al, Archana B et al and Ghani NA et al. Histopathological evaluation revealed that proliferative endometrium was the most common finding which was similar to the study done by Sudhmi S et al, whereas in study conducted by Smith S et al and Zeeba S et al endometrial hyperplasia was the commonest finding.

The bleeding in the proliferative phase may be due to anovulatory cycle which is more common in perimenopausal age group. This may be the reason of more cases of AUB in late 40s and most common finding of proliferative endometrium on histopathology in our study.

Endometrial carcinoma was seen in 2.24% of patient which shows that the incidence is very low where as in study by Talukdar B (1%) and Vani padmaja GJ et al in which malignancy was seen in 1%.

88% cases of DUB responded to the hormonal therapy and have shown reduced blood loss which was similar to study by Irvine GA et al (>80%), only 12% among these patients landed up into hysterectomy because of no response to treatment. So from our study it was found that overall response to medical treatment was good and we suggest that treatment should be individualized and conservative treatment should be the first option when clinically appropriate and surgical option should be decided only after failure of medical treatment or in case of organic cause when indicated.

6. Conclusion

AUB is the most common gynecological problem faced by women especially in the age group of 41 to 50 years of age. Most common form of bleeding pattern is heavy menstrual bleeding. These abnormal bleeding patterns should be properly evaluated along with the evaluation of endometrial tissue for histopathology. Histopathological pattern of endometrium in patients of AUB is quite variable regardless of age. Although the incidence of benign lesions are more in cases of AUB possibility of endometrial Carcinoma must be considered. Therefore endometrial biopsy should be done in all cases of AUB especially in perimenopausal and postmenopausal age group. Conservative treatment should be started first if clinically appropriate to minimize the frequency of hysterectomy and risk associated with them.

References

[1] **Sreelakshmi U, Tushara Bindu V, Subhashini T**. Abnormal uterine bleeding in perimenopausal age group women: a study on clinicopathological evaluation and management. *Int J Reprod Contracept Obstet Gynecol* 2018; 7(1):192-197.
[2] **Zarawar MP, Bolde S.** Histopathological study of endometrium in dysfunctional uterine bleeding. *Solapur Med J* 2005;1(4).
[3] **Archana B, Michelle F**. Evaluation and histopathological correlation of abnormal uterine bleeding in perimenopausal women. *J Bombay Hosp* 2010;52:69-72.
[4] **Lotha L, Borah A**. Clinicopathological evaluation of abnormal uterine bleeding in perimenopausal women. *Int J Reprod contracept Gynecol* 2016;5(9):3072-3074.
[5] **Ghani NA, Abdulrajak AA, Abdullah EM.** Abnormal uterine bleeding: histopathological study. *World Res J Clin Patho* 2012;1(1):6-8.
[6] **Sarawat R, Roohi M**. Histopathological diagnosis by conventional dilatation and curettage. *Prof Med J* 2011;18(4):587-91.
[7] **Arti R, Nayan A**. Abnormal uterine bleeding a clinicopathological study of 160 cases. *Asian J Med Res* 2013;2(1):15-8.
[8] **Smith S**. Validation of endometrial curettage in abnormal uterine bleeding in a teaching institute of central India; a prospective study. *Int J Med Res Health Sci* 2013;2(3):491-5.
[9] **Zeeba S**. Atypical uterine bleeding. Histopathological audit of endometrium. A study of 638 cases. *Al amen J Med Sci* 2013; 6(1):21-8.
[10] **Sudhami S, Sunila , Sirmukaddam S, Agrawal D**. Clinicopathological study of abnormal uterine bleeding in perimenopausal women. *J Sci Soc* 2015;42:3-6
[11] **Vani padmaja GJ, Quadri SSS, Shravan kumar O**. Histopathological profile of endometrium in perimenopausal bleeding. *IAIM* 2016;3(7):255-259.
[12] **Talukdar B, Mahela S**. Abnormal uterine bleeding in perimenopausal women: Correlation with sonographic findings and histopathological examination of hysterectomy specimens. *J Mid-life Health* 2016;7:73-7.
[13] **Irvine GA, Campbell-Brown MB, Lumsden MA, Heikkila A, Walker JJ, Cameron IT**. Randomized comparative trial of the levonorgestrel intrauterine system and norethisterone for treatment of idiopathic menorrhagia. *Br J Obstet Gnaecol* 1998;105(6): 592-8.

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