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Clinicopathological evaluation of abnormal uterine bleeding in perimenopausal female

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Abstract

Introduction: Abnormal uterine bleeding is a common complaint faced by patients consulting gynaecologists in all age groups, especially in perimenopausal women. Variations in the menstrual cycle in the perimenopausal period may be due to physiological hormonal changes or pathological etiology.

Aim & Objective: Clinicopathological evaluation of abnormal uterine bleeding in females of the perimenopausal age group.

Materials & Methods: An observational study was conducted in Department of Pathology at Saraswathi Institute of Medical Sciences, Hapur including 100 cases with clinical complaints of abnormal uterine bleeding. Perimenopausal women in the age group of 45 - 55 years were included in this study. The endometrial tissue was collected by sampling procedures such as dilatation and curettage.

Result: According to PALM-COEIN classification, Leiomyoma (AUB-L) was the most prevalent cause of AUB in the study. Next common cause of abnormal uterine bleeding was adenomyosis (AUB-A) among the age of 40-50 years.

Keywords: Clinicopathological, abnormal uterine bleeding, perimenopausal female

Introduction

Abnormal uterine bleeding is a common symptom in perimenopausal women. Abnormal uterine bleeding is defined as bleeding in which the duration, amount of bleeding and frequency is considered excessive and affecting the quality of life of woman ^[1]. Abnormal uterine bleeding can also be divided into acute vs chronic. Acute AUB is excessive bleeding that requires immediate intervention to prevent further loss. Chronic AUB, which refers to irregularities in menstrual bleeding for most of the previous 6 months ^[2]. Perimenopause is defined as the period between the first symptoms of diminished ovarian function, usually beginning in the early forties, lasting upto two years the Final Menstrual Period (FMP). AUB can cause loss of productivity and may result in surgical interventions including hysterectomy. FIGO & ACOG have recommended the PALM-COEIN abbreviation (Polyp, adenomyosis, leiomyoma, malignancy and hyperplasia, coagulopathy, ovulatory dysfunction, endometrial, iatrogenic and not yet classified). In FIGO definition, uterine bleeding is described as being normal or abnormal based frequency (Normal being every 24-38 days, and abnormal as being absent), frequent being occurring every less than 24 days, or infrequent being occurring every more than 38 days), duration (Normal being upto 8 days, and abnormal as a variation being prolonged beyond 8 days), regularity (Normal being a variation between shortest and longest period of less than 9 days, and abnormal being more than 9 days)⁽³⁾. Hysteroscopy along with biopsy is considered as gold standard in the diagnosis of AUB. Dilatation and curettage is the mainstay of endometrial sampling. Ultrasonography is an important relevant radiological diagnostic tool to identify structural abnormalities in uterus and adnexae ^[4, 5]. In our study, we are going to evaluate the clinicopathological correlation abnormal uterine bleeding in perimenopausal females.

Materials and Methods

An observational study was conducted in department of pathology at Saraswathi institute of Medical Sciences, Hapur including 100 cases with clinical complaints of abnormal uterine

bleeding. The patients are classified in different categories of abnormal uterine bleeding according to the PALM-COEIN classification. Perimenopausal women in age group of 45-55 years included in this study. Endometrial tissue collected by sampling procedure such as dilatation and curettage.

Inclusion Criteria

1. Women aged 45 to 55 years
2. Chronic AUB, including any of the following:
3. Menstrual cycle of <24 days, menstrual cycle of >38 days;
4. Irregularity of menses, cycle- to- cycle variation of >20 days during 12 months; duration of flow <4 days; volume of monthly blood loss >80ml; volume of monthly blood loss <5 ml
5. Signed informed consent to participate in this study.

Exclusion Criteria

1. Acute AUB.
2. Vaginal bleeding caused by pregnancy and pregnancy – related factors
3. Vaginal bleeding caused by vaginitis.
4. Vaginal bleeding caused by cervical diseases.
5. Bleeding before menstruation
6. Vaginal bleeding after menopause
7. Use of drugs such as sex hormones for nearly 6 months.

Review of literature

1. Clinicopathological evaluation of abnormal uterine bleeding was conducted during the period of September 2012 January to 2014 in the department of obstetrics & gynaecology, Hi-tech medical College, Bhubaneswar. It was concluded that incidence of AUB is more common in 5th decade of life and in multiparous women. Menorrhagia is the most common bleeding pattern followed by metrorrhagia. H&E of endometrium revealed that whatever may be the pathology, proliferative endometrium is the most common pattern. DUB is the most common cause of AUB and which is also mostly anovulatory type. Fibromyoma is the most common pathological cause followed by adenomyosis. Laparoscopy is the gold standard method for detecting endometriosis.
2. Retrospective study of 148 perimenopausal women with complain of AUB in the age group ranging from 40-50

years for a period of one year from 01 November 2014 to 30 November 2015. It was concluded that clinicopathological evaluation of AUB showed that fibroid uterus followed by DUB is the most common cause in perimenopausal women. Occurrences of endometrial hyperplasia increases in perimenopause which is of great value as it is a forerunner of carcinoma.

3. Prospective study of randomly selected 180 cases of abnormal uterine bleeding between 40-55 years of age group during April 2015 to July 2016, in department of obstetrics and gynaecology NMCH, Patna. It was concluded that AUB is a common gynaecological complaint associated with considerable morbidity and significantly affects the patient’s family personal and social life perimenopausal women’s health and quality of life can be maintained and improved through preventive care, life style m modification, early diagnosis of risk factor or disease and appropriate treatment

Result

The Table shows incidence of abnormal uterine bleeding between age group 15-55 years. In our clinical study, AUB was commonly seen among 40-60 years of age group i.e 81% and 19% are in age group 50a-60 years.

Structural (Polyp+ adenomyosis+ leiomyoma+ malignancy) causes accounts for 100 cases as per the PALM-COEIN classification.

No. of cases etiology

- 3 polyp
- 17 adenomyosis
- 26 leiomyoma
- 4 endometritis
- 4 endometrial atrophy
- 4 proliferative endometrial phase
- 14 secretory endometrial phase
- 17 incomplete secretory endometrial phase
- 5 disordered endometrial phase
- 6 hyperplasia of endometrium
- 2 atypia

Leiomyoma (AUB-L) was the most prevalent cause of AUB in the study. Next common cause of abnormal uterine bleeding was adenomyosis (AUB-A).

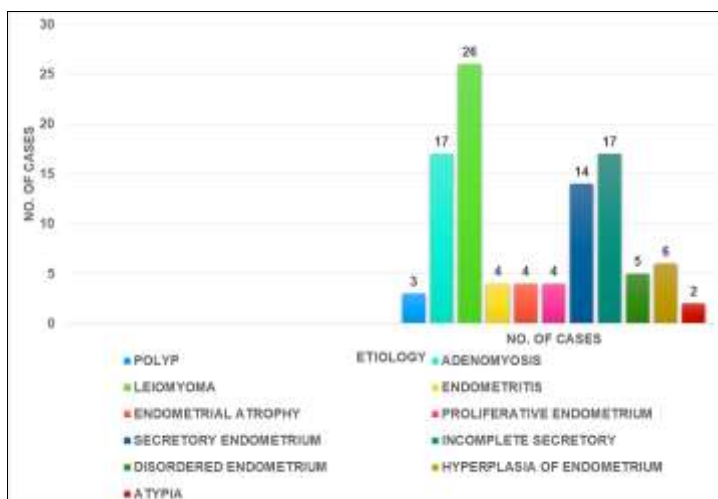


Fig 1: Chart title

Discussion

A regular menstruation has always been accepted as an indication of good reproductive health. A change in the amount, duration or regularity of this periodic loss is therefore regarded as something going wrong and not accepted by any women especially in the perimenopausal

age [6].

In our study, a total of 100 women of perimenopausal age with abnormal uterine bleeding is studied. In this study, maximum number (n=81) of AUB cases were in the age group of 40 to 50 years followed by 19 cases in 50 to 60 years.

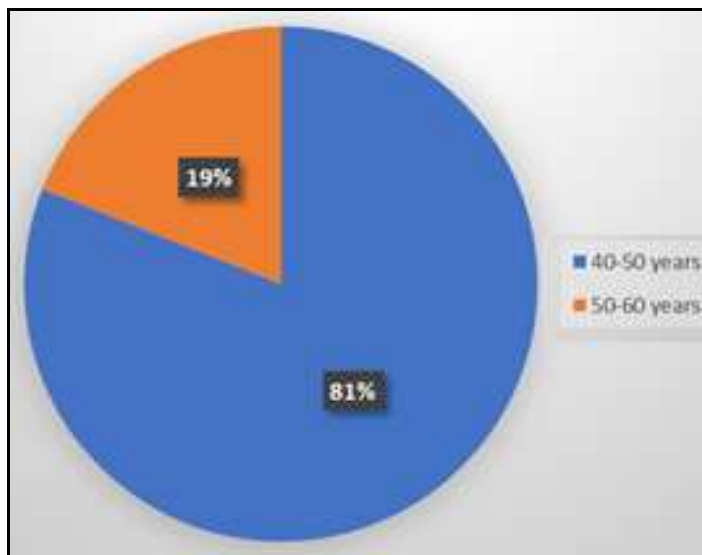


Fig 2: In our study

The incidence of menstrual disorders increases with increase in age. In this study, HMB was the most common complaint found in women. Similar findings were reported by Nair R and Mallikarjuna M, [8], which found heavy menstrual bleeding in 64% followed by intermenstrual bleeding in 18% of cases [7]. The most common cause of AUB in the present study is leiomyoma with a prevalence of, followed by adenomyosis and polyp, ovulatory, unlike studies by Gouri SR *et al.*, [11] Goel P and Rathore SB, [8] where most common was AUB-O but disorders were comparable to

Qureshi FU and Yusuf AW, and Ratnani R and Meena NA, [9], where the common cause of AUB was leiomyoma. The reason for increased incidence of abnormal uterine bleeding in this age group (41-50 years) may be due to the fact that these patients are in their climacteric period. As women approach menopause, cycles shorten, and often become intermittently anovulatory due to a decline in the number of ovarian follicles and their increased resistance to gonadotrophic stimulation causes decline in estradiol level, which cannot keep the normal endometrium growing.

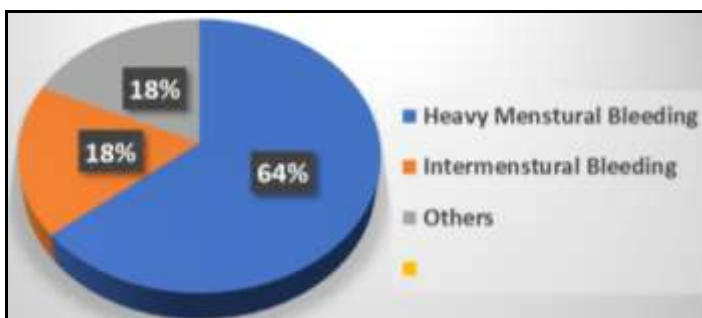


Fig 3: Nair and Mallikarjunam Study

Conclusion

In our study, an attempt has been made to evaluate the different etiological factors of AUB and to correlate the clinical presentation with ultrasonography, hysteroscopy and histopathological examination for each case. It is seen that incidence of AUB is more common in 5th decade of life and in multiparous women. Menorrhagia is the most common bleeding pattern followed by metrorrhagia.

Conflict of Interest

Not available

Financial Support

Not available

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