

Clinical Presentation and Histological Evaluation of Endometrium in Perimenopausal Uterine Bleeding

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Research Article

Abstract: Introduction: Perimenopause is the phase of the life of a woman when her body makes a shift from ovulatory cycles and menstruation towards a stage of permanent infertility called as menopause. Abnormal uterine bleeding is a common reason for women of this age group to consult their gynaecologist. **Methods:** Total 200 cases of perimenopausal uterine bleeding in women above 40 years of age were studied. 110 Endometrial samples were obtained from Dilatation and Curettage and 90 samples from hysterectomy cases. **Results:** Maximum number of cases presented with clinical features of menorrhagia (91.5%), followed by metrorrhagia (2.5%), dysmenorrhoea (3%), Leucorrhoea (2%) and pyometra (1%) constituting the rest of the cases. Histological analysis showed Proliferative endometrium to be the most common finding seen in 118 cases (59%) as a cause of perimenopausal uterine bleeding. Hyperplastic endometrium was the second most common cause observed in 32 (16%) cases followed by secretory endometrium in 23 (11.5%) cases. Atrophic endometrium was observed in 10 (5%) cases. Irregular endometrium was found in 8 (4%) cases. Endometrial polyp was observed in 4 (2%) cases and endometrial carcinoma in 4 (2%) cases. Chronic non-specific endometritis was found in a single case during this study. **Conclusion:** Uterine bleeding in the perimenopausal women is commonly dysfunctional in origin. Also, there underlying organic pathologies found which signify the importance of endometrial curetting and biopsy in the evaluation.

Keywords: Endometrium, Perimenopausal, Uterine Bleeding.

Introduction

Perimenopause is the phase of the life of a woman when her body makes a shift from ovulatory cycles and menstruation towards a stage of permanent infertility called as menopause. Menopause is the permanent cessation of menstruation resulting from loss of ovarian follicular activity. The age at which natural menopause occurs varies between the age of 45 and 55 years across the world while a study from the northern part of India found that the mean age at menopause was 44.54 years.[1] Abnormal uterine bleeding is a common reason for women of this age group to consult their gynaecologist. Abnormal uterine bleeding may be defined

as a bleeding pattern that differs in frequency, duration, and amount from a pattern observed during a normal menstrual cycle or after menopause. [2] It is inclusive of both the dysfunctional uterine bleeding (DUB) and the bleeding occurring from various structural causes like uterine fibroids, polyps, carcinoma of the endometrium and bleeding due to the complications of pregnancy. There is no demonstrable organic cause seen in dysfunctional uterine bleeding and the endometrial curettage plays a very important role for the exclusion of various organic uterine disorders. [3, 4] This procedure is useful as it allows an extensive sampling of the uterine cavity and it also has a higher sensitivity than the endometrial biopsy especially with smaller in situ lesions. The present study was undertaken to study the clinical presentation and histological features of endometrium in perimenopausal uterine bleeding

Methods

The present study was carried out in Department of Pathology, Government Medical College and Hospital, Aurangabad. Total 200 cases of perimenopausal uterine bleeding in women above 40 years of age were studied. Supportive data like age and menstrual status was obtained from case sheets accompanying the specimens. Detailed clinical history and examination as per proforma was taken wherever required.

Endometrial samples were obtained from:

1. Dilatation and curettage = 110 cases
2. Hysterectomy specimens = 90 cases

Specimens were received in 10% formalin. These were studied grossly and multiple sections were taken from each. Four to five micron thick paraffin embedded sections were taken and staining was done. Staining was done by Haematoxylin and Eosin in all endometrial tissues. PAS staining was done wherever required. Deep

cuts, serial sections and fresh pieces were taken wherever necessary. Various histopathological endometrial patterns were studied and categorized as per standard literature.

Results

Following tables and figures summarize the results.

Table 1: Age wise distribution of cases of perimenopausal bleeding

Age (Yrs.)	No. of cases	Percentage
40-44	76	38.0
45-49	69	34.5
50-54	26	13.0
55-59	29	14.5

Table 2: Distribution of cases according to clinical features

Symptoms	Age Group (Yrs.) (n=200)				Total
	40-44	45-49	50-54	> 55	
Menorrhagia	67	64	24	28	183
Metrorrhagia	04	01	00	00	05
Dysmenorrhoea	04	02	00	00	06
Leucorrhoea	01	02	01	00	04
Pyometra	00	00	01	01	02
Total	76	69	26	29	200

Table 3: Endometrial histological patterns observed

Lesion	No. of cases	Percentage
Proliferative	118	59.0
Secretory	23	11.5
Atrophic	10	05.0
Irregular endometrium	08	04.0
Hyperplasia	32	16.0
Carcinoma	04	02.0
Endometrial polyp	04	02.0
Endometritis	01	00.5
Tuberculosis	00	00

Discussion

Majority of patients (72.5%) were between 40-49 years age group. A similar distribution has been reported in earlier studies. Sutherland [5], Sagar [6], Sukhdeep [7] and Zlatklov [8] also recorded greatest number of patients in this age group while investigating subjects with perimenopausal uterine bleeding. Some of the causes of bleeding (above the age of 40) include functional disorders like anovulatory cycles and irregular shedding; and organic lesions like carcinoma, adenomyosis, leiomyoma and polyp. Patients had excessive, profuse or prolonged menstruation, irregular acyclic bleeding between periods with or without associated pain and thick whitish discharge per vaginum. The most common symptoms with which the patients presented were menorrhagia (91.5%). This finding is common with

earlier studies. Sagar [6] observed menorrhagia as the most common symptom. Perimenopausal bleeding may be associated with almost any histological pattern in endometrium. In this study, normal endometrium (proliferative and secretory pattern) was found in 141 cases (70.5%). A similar normal pattern of endometrium was reported in 63.5% of subjects by Sutherland [5]. However, Zlatklov [8] reported normal pattern of endometrium in 13.9% cases.

Conclusion

Maximum number of cases presented with clinical features of menorrhagia (91.5%) while Histological analysis showed Proliferative endometrium to be the most common finding seen in 118 cases (59%) as a cause of perimenopausal uterine bleeding. Hyperplastic endometrium was the second most common cause observed in 32 (16%) cases followed by secretory endometrium in 23 (11.5%) cases. Atrophic endometrium was observed in 10 (5%) cases. Irregular endometrium was found in 8 (4%) cases. Endometrial polyp was observed in 4 (2%) cases and endometrial carcinoma in 4 (2%) cases. Uterine bleeding in the perimenopausal women is commonly dysfunctional in origin. Also, there underlying organic pathologies found which signify the importance of endometrial curetting and biopsy in the evaluation.

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