

Causes of Postmenopausal Bleeding in Our Population

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Objective: To evaluate common causes of postmenopausal bleeding in our population. **Study design:** Observational Analytical study. **Settings:** Department of Obstetrics & Gynaecology unit II Lady Willingdon Hospital Lahore from June 2000 to May 2002. **Materials & methods:** Hysteroscopically directed endometrial biopsies were taken from 100 cases of postmenopausal bleeding and were sent for histopathology. The data was collected with the help of Performa which was filled for every patient. **Results:** In our part of world, Atrophic Endometrium is the commonest cause of Postmenopausal Bleeding (PMB). Next common being Endometrial Hyperplasias. Out of malignant causes, Carcinoma Cervix is the commonest. **Conclusion:** Postmenopausal bleeding (PMB) should be taken seriously; no matter how less the bleeding is and malignant causes should be ruled out.

Key words: Bleeding, postmenopausal

The term menopause is derived from two Greek words, i.e. *menos* (months) and *pause* (to stop). It means complete or permanent cessation of ovarian function and consequently menstruation. Menopause is the last menstrual bleed and can be diagnosed retrospectively after one year of amenorrhoea¹.

The average age of menopause is 51 years. It is part of the natural aging process between the woman's reproductive and non reproductive years.

Post menopausal bleeding (PMB) is an important cause of morbidity and must be investigated promptly as it can be the hallmark of underlying malignancy.

PMB has been said to be a phenomenon of Western World probably due to increased use of exogenous estrogens, high degree of obesity and increased awareness and reporting².

In Sweden, the incidence of PMB is 13/1000 women at age of 52 years and 2/1000 at 80 years. In U. K. incidence is 13.6/1000 and 1.7/1000 respectively. Although use of exogenous estrogens and prevalence of obesity is lower in our population, PMB is not that uncommon³.

The purpose of this study was to find out the common causes of PMB in the population presenting to Lady Willingdon Hospital which is a tertiary referral center. A total of 100 patients with PMB were included in the study. Detailed history and examination was carried out. All patients were investigated including ultrasonography to assess endometrial thickness. Cervical cytology and biopsies were done in indicated cases. Dilatation and Curettage (D & C) was done under General Anaesthesia (G/A) & specimen sent for histopathology reporting.

Objectives/Purpose:

To evaluate common causes of PMB in our population.

Materials & methods:

Study was carried out in unit II of Lady Willingdon Hospital Lahore (LWH) from June 2000 to May 2002. It was an observational analytical study. Convenience

sampling technique was adopted. 100 patients with PMB who had been admitted either through Out Patient Department (OPD) or Emergency were included.

Inclusion Criteria:

1. Patients with their last menstrual period (LMP) at least one year before their symptoms of bleeding.
2. Patients with blood stained discharge were also included.

Exclusion Criteria:

1. Patients who got any prior treatment.
2. Patients with premature menopause.
3. Patients with H/O Hysterectomy.

Hysteroscopically directed endometrial biopsy was taken under local anaesthesia (L/A) in day case unit as an out patient procedure in majority of cases. In few cases admission was needed and dilatation and curettage under G/A was done. Sample was placed in sterile container of formalin and sent to department of pathology King Edward Medical College (KEMC) for Histopathology (H/Path). The data and H/P report was entered on to a Performa which was filled for every patient. In some indicated cases, cervical and vulval biopsies were also taken under G/A. In few cases, where adequate sample was not available or results were unequivocal, hysterectomy specimen was sent for H/P and results obtained. Similarly Staging Laparotomy was done in suspected case of carcinoma ovary & biopsy results were included.

Results:

One hundred patients with Postmenopausal Bleeding (PMB) were included in the study. Out of 100 pts, 20% had atrophic endometrium, 27% had endometrial hyperplasia (Simple hyperplasia in 56%, complex hyperplasia in 34% & atypical hyperplasia in 10% cases). Malignancy constituted 20% of causes of PMB. Carcinoma (CA) cervix was found in 11% of cases as composed to Carcinoma (CA) endometrium which was found in 5% & Carcinoma (CA) ovary which was seen in 4% of cases as shown in Table. I.

Benign Endometrial Pathology including polyps in 15% cases, uterovaginal prolapse having decubitus ulcer in 2% cases, Hormone Replacement Therapy (HRT) was the cause in 3% cases, Dermatological lesions of vulva (Lichenoid) in 2% & ulceration from neglected pessary in 1% cases.

Hysteroscopically directed endometrial biopsy under local anaesthesia was the commonest diagnostic modality used to evaluate the cause of PMB (48%). Next common modalities were Dilatation and Curettage (D & C) under G/A (20%), Examination Under Anaesthesia (EUA) & cervical biopsy (15%) Hysterectomy (10%), Laprotomy (4%) & Vulval /Vaginal biopsy (3%) as shown in Table II.

Ages of the patients ranged from 45-73 years. Majority of cases (33%) presented between 56-60 years. Next common age group was between 61-65 years (22%) as shown in Table III.

Table I: Causes of postmenopausal bleeding (PMB)

Causes	n=	%age
Atrophic Endometrium	30	30
Endometrial Hyperplasia	27	27
Simple	15	
Complex	9	
With atypia	3	
Endometrial pathology including benign polyps	15	15
Malignancy	20	20
CA Cervix	11	
CA Endometrium	5	
CA Ovary	4	
UV Prolapse with decubitus ulcer	2	2
Exogenous oestrogen (HRT)	3	3
Dermatological Lesions of vulva	2	2
Ulceration from Neglected Pessary	1	1

Table II: Diagnostic approach / modalities used for evaluation

Methods	n=	%age
Hysteroscopically taken endometrial sample under L/A	48	48
Dilatation & Curettage under G/A	20	20
EUA/Cervical Biopsy/ Endometrial Biopsy	15	15
Hysterectomy Specimen	10	10
Laparotomy + Biopsy	4	4
Vulval / Vaginal Biopsy	3	3

Table III: Age distribution with postmenopausal bleeding

Age (years)	n=	%age
45 - 50	8	8
51 - 55	12	12
56 - 60	33	33
61 - 65	22	22
66 - 70	17	17
> 70	8	8

Discussion:

Although most cases of PMB are due to benign causes but it should always be taken seriously. There is no good way to distinguish whether the cause is benign or malignant on

the basis of amount or quality of bleeding. Likelihood of malignancy increases with length of duration from menopause. Early studies reported the risk of endometrial cancer associated with PMB as 50-55% . More recent studies suggest incidence to be 1.5-25% with an average of 11%⁴.

Other common causes of PMB in literature include exogenous estrogens, Endometrial Hyperplasia, Polyps, Atrophic Endometritis, Cervical Carcinoma & other miscellaneous causes⁵.

The aim of investigations is to exclude both endometrial cancer and atypical hyperplasia⁶. Previously it was done by fractional curettage under G/A. But now hysteroscopy has enabled visualization of entire uterine cavity and directed biopsy. However many women are overweight, hypertensive & diabetic so the risk of G/A is substantial in such women. This has led to the development of outpatient investigations like endometrial sampling. Other such methods are transvaginal scan (TVS) to measure endometrial thickness and outpatient hysteroscopy. Hysteroscopy allows visual inspection of uterine cavity and can help ensure that foci of abnormal endometrium are sampled for histological analysis.

Review of our cases indicated an overall malignancy rate of 20% in patients presenting with PMB. Commonest malignant lesion was CA cervix found in 11 (11%) cases which is quite different from Western studies⁷.

Carcinoma of endometrium is more prevalent in the west probably due to common use of Hormone Replacement Therapy (HRT) there. It is less fashionable to treat menopausal symptoms with HRT in our country because women regard these symptoms as part of natural aging process.

Atrophic endometrium was the commonest cause of PMB in our study (30%). Atrophic Endometrium causes bleeding probably due to myometrial atherosclerosis or rupture of atrophic endometrial cysts.

Endometrial hyperplasia was the second most common lesion probably due to increased conversion of endogenous estrogen within fat cells and inadvertent intake of medicines from GPs & Hakims regarding which they are unable to provide any information.

Conclusion

The study concluded the following aspects of postmenopausal bleeding in our population:

1. Atrophic Endometrium is the most common cause of PMB in our population.
2. Hysteroscopically directed endometrial biopsy was the most commonly used & reliable diagnostic method in our study.
3. Malignancy is one of important causes of PMB and it constitutes about 20% of causes of PMB.
4. Out of malignant causes, most patients were of CA CX (11%) as compared to CA endometrium (5%).

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5. Most patients of PMB were in the age group 55-65 years (55%) in our study.

It is suggested that PMB is a symptom which should have serious attention of the patient and her physician so that malignancy can be ruled out at initial stages because this can be done by relatively simple diagnostic modalities.

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