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# CLINICOPATHOLOGICAL STUDY OF POSTMENOPAUSAL BLEEDING IN A TERTIARY CARE HOSPITAL: UDAIPUR, RAJASTHAN.

Obstetrics & Gynaecology

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## ABSTRACT

**INTRODUCTION:** Postmenopausal bleeding (PMB) requires complete evaluation in order to identify and treat high risk patients and detect malignancy. The aim of the present study was to investigate the clinical significance and endometrial pathology in patients with postmenopausal bleeding.

**METHODS:** In this prospective study, the data was obtained from 80 patients with PMB attending the OPD or admitted for evaluation under obstetrics and gynaecology in PIMS , Udaipur. Written and informed consent was taken from all the patients enrolled in the study. They were evaluated by history, clinical examination and investigations like transvaginal sonography, endometrial biopsy, fractional curettage, Pap smear done for all subjects and the specimens collected was sent to the department of pathology for examination and reporting.

**RESULTS:** In patients with post-menopausal bleeding, atrophic endometrium was seen in 34%, proliferative endometrium in 12%, isthmic endometrium in 1%, polyp in 4%, hyperplasia without atypia in 1%, with atypia in 45% endometrial carcinoma in 6% of the patients with PMB. Benign conditions were seen in 94% and malignancy was seen in 2.5% cases.

**CONCLUSION:** Postmenopausal bleeding requires complete evaluation in terms of risk factors, etiology, endometrial pathology to identify the women at risk of endometrial cancer. Obesity, hypertension, diabetes mellitus and age since menopause are the risk factors for PMB. By complete assessment and treatment we can reduce the incidence of endometrial cancer in women with PMB.

## KEYWORDS

## INTRODUCTION:

Menopause is defined as permanent cessation of menstruation resulting from loss of ovarian activity.[1] Postmenopausal bleeding (PMB) is defined as abnormal uterine bleeding occurring after 1 year of permanent cessation of menstruation resulting from loss of ovarian follicular activity.[2] It takes 12 months of amenorrhoea to confirm that menopause has set in, and therefore it is a retrospective diagnosis. Menopause normally occurs between the ages of 45 and 50 years, the average age being 47 years. In today's gynaecological practice Postmenopausal bleeding (PMB) is not an uncommon clinical presentation. Women not on HRT if presented with PMB must be evaluated.

Endometrial atrophy is the most common cause of PMB whereas endometrial hyperplasia and polyps are other common causes.[3] Non gynaecological causes include trauma, bleeding disorders. Other causes are vaginal atrophy, use of HRT, senile endometritis, endometrial cancer, benign and malignant ovarian cancers, uterine sarcoma, vaginal and vulval cancers.

Hence women with PMB must be evaluated promptly to identify women at risk of endometrial cancer and treat them accordingly. So this study was conducted to investigate the clinical significance of postmenopausal bleeding in terms of etiology, risks factors, incidence of malignancy, and histopathological evaluation.

## METHODS:

### SOURCE OF DATA:

The data was collected from patients with postmenopausal bleeding per vaginum attending the outpatient department or admitted for evaluation under obstetrics and gynaecology department, PIMS medical college, Udaipur from Feb 2021 to November 2021.

### Study Design:

This study was a prospective study of the patients with postmenopausal bleeding attending the outpatient department or admitted for evaluation under obstetrics and gynaecology department at PIMS medical college.

### Data Collection:

Written and informed consent was taken from all the patients enrolled in the study. They were evaluated by history, clinical examination and investigations like transvaginal sonography, endometrial biopsy, fractional curettage, Papanicolau Smear and hysteroscopic guided biopsy if required was done for all subjects and the specimens collected was sent to the department of pathology for examination and reporting. Depending on the reports obtained, the data was recorded and analysed by descriptive statistics using percentages.

Complete evaluation done by history, physical examination & investigations which include complete blood picture, fasting blood sugar & pelvic ultrasound. Pap smear and diagnostic curettage were performed. The specimens from endometrial biopsy/curettage were sent for histopathological evaluation.

The endometrial samples were divided into the following histological categories: atrophy; proliferative; endometrial polyp; cystic glandular hyperplasia; hyperplasia with atypia, hyperplasia without atypia, carcinoma and others.

### Inclusion Criteria:

Post-menopausal women with complaints of per vaginal bleeding.

### Exclusion Criteria:

1. Patients with bleeding disorders / blood dyscrasias.
2. Patients on anticoagulant therapy.

**Sample size:**80.
**Age group:** Postmenopausal women

***Statistical analysis:***

Descriptive statistics was applied and data was analysed by percentages.

| AGE WISE DISTRIBUTION | NUMBER | PERCENTAGE |
|---|---|---|
| 45-54 | 45 | 56.25 |
| 55-64 | 26 | 32.5 |
| 65 & ABOVE | 9 | 11.25 |

| PARITY | NUMBER | PERCENTAGE |
|---|---|---|
| NULLIPAROUS | 3 | 3.75 |
| 1TO 3 | 60 | 75 |
| >3 | 17 | 21.25 |

| AGE SINCE MENOPAUSE | NUMBER | PERCENTAGE |
|---|---|---|
| 1 TO 5 | 55 | 68.75 |
| 6 TO 9 | 11 | 13.75 |
| >10 | 14 | 17.5 |

| RISK FACTORS | NUMBER | PERCENTAGE |
|---|---|---|
| DM | 22 | 27.5 |
| HTN | 46 | 57.5 |
| OBESITY | 4 | 5 |
| HYPOTHYROID | 2 | 2.5 |
| NO ILLNESS | 6 | 7.5 |
| HRT | - | |

| PAPSMEAR REPORT | NUMBER | PERCENTAGE |
|---|---|---|
| NILM | 42 | 52.5 |
| Inflammation | 22 | 27.5 |
| Atrophic | 16 | 20 |

| ENDOMETRIAL THICKNESS | NUMBER | PERCENTAGE |
|---|---|---|
| 1-3mm | 32 | 40 |
| 4-9mm | 52 | 65 |
| 10-14mm | 3 | 3.75 |
| >15mm | 3 | 3.75 |

| ENDOMETRIAL SAMPLING | NUMBER | PERCENTAGE |
|---|---|---|
| ATROPHIC | 27 | 33.75 |
| PROLIFERATIVE | 9 | 11.95 |
| ISTHMIC | 1 | 1.25 |
| POLYP | 3 | 3.75 |
| CGH | 1 | 1.25 |
| EH WITH ATYPIA | 1 | 1.25 |
| EH WITHOUT ATYPIA | 36 | 45 |
| ENDOMETRIAL CANCER | 2 | 2.5 |

## RESULTS:

Most of the patients(56.25%) of PMB were in the age group of 45-54years followed by 32.5 % between 55-64 years. Majority of them (75%)were multiparous, 3(3.75%) were nulliparous. 68.75%(55) of the patients with postmenopausal bleeding presented within 1-5 years after menopause , 13.75%(11)between 6-9 years, and 17.5% (14)after 10 years of menopause.

57.5%(46) of the patients presenting with postmenopausal bleeding had DM, 27.5%(22) had DM, 5%(4) had obesity, 2 (2.5%)were hypothyroid, 6(7.5%) had no illness and no one on HRT.

## DISCUSSION:

Postmenopausal bleeding is defined as any bleeding from the female genital tract in the appropriately aged woman, not using hormonal therapy for at least six months after cessation of menstruation or acyclical vaginal bleeding in a postmenopausal woman using hormonal therapy.[4] PMB occurs in approximately 10% of postmenopausal women. PMB represents one of the most common reason for referral to gynaecological services, largely due to suspicion of an underlying endometrial malignancy.[5] A woman not taking hormone replacement therapy (HRT), who bleeds after the menopause has a 10% risk of having genital cancer and a further 10% risk of significant pathology.[6] This study was undertaken to investigate the clinical significance and endometrial pathology in patients with postmenopausal bleeding.

In our study PMB was most commonly found in multiparous women. These results were in accordance with the results in other studies like, Rita D et al[7] 99% were multiparous, Kothapally et al 90% were multiparous women and Nirupama V et al which also had 90% multiparous women presenting with postmenopausal bleeding.

In present study DM, HTN, were the main risk factors for PMB. These findings are similar to the study conducted by Kothapally K et al who found that obesity (43.3%), diabetes (36.6%) and hypertension (13.3%).[8] Similarly in a study by Nirupama V et al risk factors of the patients with PMB like obesity, hypertension and diabetes were 45%, 36% and 13% respectively.[9]

Pap smear shows that almost 52.5% of the patients presenting with PMB had NILM, 27.5% had inflammation, 20% had atrophic smear. Pelvic USG showed endometrial thickness of >4mm in majority of cases(65%) followed by 1-3mm were 40%. These findings were similar to the study done by kothapally K et al who found that women with a thick endometrial thickness >4 mm are at risk of endometrial carcinoma. The common histopathology of endometrium was endometrial hyperplasia without atypia, next common being atrophic endometrium & proliferative endometrium. 2 patients were diagnosed with endometrial carcinoma.

| | CURRENT STUDY | RITA D et al | Nirupama V et al | Karmarkar P et al |
|---|---|---|---|---|
| ATROPHIC | 27 | 31% | 11 | 32 |
| PROLIFERATIVE | 9 | 13% | - | 16.8 |
| ISTHMIC | 1 | 5% | - | - |
| POLYP | 3 | 5% | 8 | 4 |
| CGH | 1 | - | - | - |
| EH WITH ATYPIA | 1 | 4 | - | 7.2 |
| EH WITHOUT ATYPIA | 36 | 36 | 18 | 21.2 |
| ENDOMETRIAL CANCER | 2 | 6% | 12 | 3.6 |

## CONCLUSION:

Postmenopausal bleeding requires complete evaluation in terms of risk factors, etiology, endometrial pathology to identify the women at risk of endometrial cancer , so that we can treat the women accordingly. By complete assessment and treatment we can reduce the incidence of endometrial cancer in women with PMB.

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