EXTENSIVE CLINICAL INVESTIGATION AND ANALYSIS OF POST-MENOPAUSAL BLEEDING EXCLUDING CARCINOMA

Dr. Amita Sharma¹, Dr. Vidhi Singh², Dr. Anshika Agarwal³, Dr. Shubhanshu Gupta^{4*}

- ¹Associate Professor, Department of Obstetrics and Gynaecology, Government Medical College, Datia (M.P.)
- ²Assistant Professor, Department of Obstetrics and Gynaecology, Government Medical College, Datia (M.P.)
- ³Senior resident, Department of Obstetrics and Gynaecology, Government Medical College, Datia (M.P.)
- ⁴Assistant Professor, Department of Community Medicine, Government Medical College, Datia (M.P.)

*Corresponding Author- Dr Shubhanshu Gupta Email- guptashubhanshu1@gmail.com

Abstract

Background and Objectives- Menopause is the term used to describe the irreversible end of menstruation brought on by ovarian activity decline. The menopause typically lasts from 45 to 50 years of age. to assess and determine the frequency of different post-menopausal bleeding sources, omitting cancer.

Methods- Prospective study done over a period of six months from July 2023 to December 2023 and total of 60 cases were included in the study. The study was conducted on all postmenopausal women with bleeding registered to Obstetrics and Gynaecology out- patient department of Government Medical College, Datia (M.P.) who fulfilled the inclusion criteria, with abnormal uterine bleeding who attained menopause naturally, history and clinical examination were included. Women who were diagnosed carcinoma cervix were excluded.

Results- Most of the patients belonged to age group between 55-59 years comprising 50%, followed by 60-64 years 25%. Eight percent belonged to 50-54 years and 65-69 years and 6% belonged to 45-49 years. Patients are classified on the basis of onset of menopause and 50-54 years were found to be most common age group comprising 50%, followed by 55-59 years 22%. Among the 45-49 years 17% had onset of menopause. This study comprised sixty cases of vaginally bleeding post-menopausal women, and a comprehensive analysis was conducted to determine the frequency of different causes of vaginal bleeding. The duration of menopausal bleeding in the current study ranges from less than a year to more than five years. Fifty percent of the women experienced postmenopausal hemorrhage during the first three years. The majority of them reported experiencing vaginal bleeding.

Conclusion- Individuals who are bleeding after menopause should also be closely watched for a long time. Women's death and morbidity rates are clearly reduced when hyperplasia, cervical, and endometrial malignancies are detected and treated early. These conditions also have excellent survival rates.

Keywords- Menopause, postmenopausal bleeding, benign, endometrial thickness, endometrial polyp.

Introduction-

The menstrual cycle permanently ends after the menopause because of a decrease in ovarian activity. It happens at 51 years of age on average. Regardless of whether the menopause was forced or spontaneous, the World Health Organization defines post menopause as beginning with the last menstrual cycle. ¹

Pre-, Peri-, and Post-Menopause: These terms refer to the times just prior to, during, and following the end of a woman's menstrual cycle, respectively. According to clinical impressions, mothers and daughters typically go through menopause at the same age. Any incident of bleeding should be reported to a gynecologist because post-menopausal bleeding is not typical. Menopause bleeding is more common in women receiving estrogen replacement medication.²

Early menopause^{3,4}: This refers to the time frame that followed menopause by two years. Senescence: Following sixty years of age. Some people set the threshold age at 65.

STAGE I: The first signs of perimenopause, which are typically vasomotor instability or irregular menstruation, appear three to five years before menstruation ends (menopause).

Five years following menopause is STAGE II. Stage II A and Stage II B were further subdivided into this stage.

STAGE II A: vasomotor instability and urethral syndrome, from the cessation of menstruation upto one year.

STAGE II-B: Atrophic symptoms, vaginitis, dyspareunia, urinary symptoms, weight growth, and changes in skin and hair from the conclusion of stage II A to four years of age

STAGE III: From 5 years after menopause upto an indefinite period; probably life time with atrophic symptoms, ischemic heart disease and early osteoporosis, cerebrovascular changes and Alzheimer's disease. Benign conditions are most frequent causes of Postmenopausal bleeding but endometrial cancer is the most serious potential underlying cause.

Post-menopausal bleeding is characterized by those who experience vaginal bleeding subsequent to menopause. The menopause typically lasts between 45 and 52 years. 10% of postmenopausal women experience benign causes of bleeding, which is an alarming symptom that prompts many to seek a gynecologist's opinion right away. A significant portion of these

referrals are made because of suspicions about underlying malignancy.^{5,6}

Postmenopausal bleeding has several etiological factors, including ovarian tumors, endometritis, endometrial polyps, fibroids DUB, vulval lesions, vulval wart erosions, senile vaginitis, atrophic vaginitis, vaginal infections, senile cervicitis, atrophic cervicitis, cervical erosions, and cervical polyps. These factors can also include medical conditions like hypertension and bleeding disorders. The rationale behind the study was to assess and determine the frequency of different post-menopausal bleeding sources, omitting cancer.

Materials and methods-

Prospective study done over a period of six months from July 2023 to December 2023 and total of 60 cases were included in the study. The study was conducted on all postmenopausal

women with bleeding registered to Obstetrics and Gynaecology out-patient department of Government Medical College, Datia (M.P.) who fulfilled the inclusion criteria, with abnormal uterine bleeding who attained menopause naturally, history and clinical examination were included. Women who were diagnosed carcinoma cervix were excluded.

Statistical Analysis-

Statistical analysis was performed by using Statistical Package for Social Sciences (SPSS) trial version 22.0 (SPSS Inc., Chicago, IL, USA). Independent sample t-test was used to compare quantitative between two groups. Fisher's exact test was used to compare number qualitative variables reported between the two groups. P < 0.05 was considered statistically significant.

Results-

Table 1- Age wise distribution of study participants

Age	No. of patients	percentage
Age 45-49	3	6%
50 -54	5	8%
55-59	30	50%
60-64	15	25%
65-69	5	8%
70- 74	2	3%

As per table 1 most of the patients belonged to age group between 55-59 years comprising 50%, followed by 60-64 years

25%. Eight percent belonged to 50-54 years and 65-69 years and 6% belonged to 45-49 years.

Table 2- Distribution based on age at onset of menopause

Age at menopause	No. of patients	percentage
45-49	10	17%
50-54	30	50%
55-59	13	22%
60-64	4	6%
>65	3	5%

As per table 2 patients are classified on the basis of onset of menopause and 50-54 years were found to be most common age

group comprising 50%, followed by 55-59 years 22%. Among the 45-49 years 17% had onset of menopause.

Table 3- Duration of menopause as per study participants

Duration of menopause	No. of patients	percentage	
Less than 1 year	5	8%	
1-3 year	30	50%	
3-5 years	15	25%	
More than 5 years	10	17%	

As per table 3 This study comprised sixty cases of vaginally bleeding post-menopausal women, and a comprehensive analysis was conducted to determine the frequency of different causes of vaginal bleeding. The duration of menopausal

bleeding in the current study ranges from less than a year to more than five years. Fifty percent of the women experienced postmenopausal hemorrhage during the first three years. The majority of them reported experiencing vaginal bleeding.

Table 4- Distribution as per duration of bleeding

Duration of bleeding	No. of patients	percentage
Less than 20 days	16	27%
1 month	30	50%
1 month to six months	10	17%
More than six months	4	6%

As per table 4 duration of bleeding was mostly for 1 month seen in 50% followed by less than 20 days in 27%. Around 6% had duration of bleeding for more than 6 months which may be

associated with some unknown gynaecological complications but this was not statistically significant (p>0.05).

Table 5- Medical disorders as per study participants

Medical disorders	No. of patients	Percentage
Hypertension	17	27%
Diabetes mellitus	10	17%
Anemia	33	64%

As per table 5 most of study subjects has anemia (64%) followed by hypertension in 17% cases and diabetes in 10% cases.

Table 6- Types of Management among study participants

Mode of management	No. of patients	Percentage	p-value
Medical management	15	25%	0.01*
Surgical	37	62%	
Cervical dilatation &	& 8	13%	
drainage of pus			

As per table 6 the most common management was surgical in 62% followed by medical management in 20% cases and it was found to be statistically significant (p<0.05). Cervical dilatation

and drainage of pus was also seen as management option in 13% of cases.

Table 7- Histopathological findings among study participants

Histopathological findings	No. of patients	Percentage	
benign	30	50%	
proliferative	10	17%	
atrophic	5	8%	
Endometritis	7	10%	
fibroids	5	8%	
Endometrial polyp	3	5%	

As per table 7 most common histopathological findings were benign (50%) and 17% were proliferative. Among participants

8% were atrophic, 5% were polyp etc. Also seen the USG image of thickened endometrium (Figure 1)

U1 3440 3440 354

Figure 1- Thickened Endometrium

Discussion-

In this study, 60 postmenopausal bleeding women were enrolled, assessed, and the prognosis and appropriate management were examined. Postmenopausal bleeding is typically caused by benign (mainly local) causes, such as changes in the vagina and cervical tissues brought on by menopause; malignant causes are the second most common cause. Within the category of malignant causes, ovarian cancer was the most often reported type of cancer in present research. There were seven causes of

malignancy in the current study. Four ovarian malignancies were identified out of the seven malignant causes: 1) classical clear cell granulosa tumor; 2) left serous cystadenocarcioma; 3) right ovarian adenocarcinoma ovary; and 4) ovarian carcinoma. Two endometrial carcinomas and one vaginal carcinoma were also included in this group. The percentage of malignancy in women with postmenopausal hemorrhage was 14%. This indicates that all Indian postmenopausal women should be screened for genital tract cancer.^{5,6}

One dark issue that postmenopausal women often experience is postmenopausal hemorrhage, which typically manifests five to ten years following menopause. The average age of onset is fifty to sixty years old. The etiology of postmenopausal bleeding encompasses benign factors such as atrophic or proliferative endometrium, endometrial or cervical polyps, simple or complex endometrial hyperplasia with or without atypia, atrophic vaginitis, and senile endometritis.⁷

In the present study, the majority of post-menopausal bleeding cases had benign causes related to menopausal changes. These cases should be assessed, and careful examinations such as bimanual and recto vaginal exams should be carried out to distinguish between genital bleeding and urethral or rectal bleeding.

Histologic sample of endometrial, endo and ectocervix provides the foundation for evaluating postmenopausal hemorrhage. Transvaginal and abdominal ultrasounds continue to be the cornerstones of non-invasive testing, both reflecting and changing the diagnosis. Wherever hysteroscopic guided biopsy is possible, it should be used because it is more diagnostically valuable for the ultimate diagnosis. Nine persons may benefit from different types of hormonal therapy if their postmenopausal bleeding has non-malignant origins. 9

Atrophic endometrium is the typical description of postmenopausal endometrium. ^{10,11} Endometrial hyperplasia is preceded by high levels of circulating estrogens in the body, and it is concerning that 32% of the women in our study showed functioning endometria. Similar results were found in some studies in their investigation, wherein 32.5% of the endometrium was functional and the women needed long-term follow-up. ^{12,13}

Conclusion

The most frequent causes of postmenopausal bleeding in women who have gone through menopause are benign tumors. Nonetheless, in order to start treatment as soon as possible, the assessing and treating professionals should develop a firm suspicion of endometrial and cervical cancer. Patients experiencing postmenopausal bleeding should also be monitored for an extended period of time. Early identification and treatment of hyperplasia, cervical, and endometrial cancers have

a very high cure rate, improve survival rates, and demonstrably lower women's mortality and morbidity rates.

References

- 1. *Jeffcoates principles of gynaecology "menopause" chapter 53 seventh edition 2008:863-864pp.*
- 2. Haines & Talyer Obsterical & gynaecological pathology 5th edition.
- 3. Mendelson EB, Bohm-velez M, Joseph N et al: Endometrial abnormalities: Evaluation with transvaginal sonography. AJR 2018; 150: 139-42.
- 4. Mogavero G, Sheth S, Hamper UM. Endovaginal sonography of the nongravid uterus. RadioGraphics 2013; 13:969-81.
- 5. Nasri MN and Coast GJ: Correlation of ultrasound findings and endometrial histopathology in postmenopausal women. Br H Obstet Gynaecol 2019; 96:1333-38.
- 6. Nasri MN, Shepherd JH, Setchell ME, Lowe DG, Chard T: The role of vaginal scan in measurement of endometrial thickness in postmenopausal women Br H Obstet Gynaecol 2011;98:470-75.
- 7. Osmers R, Volksen M and Schauer A: Vaginosonography for early detection of endometrial carcinoma? Lancet 2020; 335: 1569-71
- 8. Parsons AK, Lense JJ: Sonohysterography for endometrial abnormalities: preliminary results. J Clin Ultrasound 2013; 21:87-95.
- 9. Saksouk FA: Endometrium, carcinoma. eMedicine 2002:1-29. 10. Schoenfeld A, Levavi H, Hirsch M, Pardo J, Ovadia J. Transvaginal sonography in postmenopausal women. J Clin Ultrasound 2020; 18: 350-58.
- 11. Smith-Bindman R, Kerlikowske K, Feldstein VA, Subak L; Scheidler J; Segal M; et al. Endovaginal ultrasound to exclude endometrial cancer and other endometrial abnormalities. JAMA 2018; 280:1510-1710.
- 12. vanden bosch t, ameye l, vanschou broeckd, et al. Intra cavitary uterine pathology in women with abnormal uterine bleeding; a prospective study of 1220 women facts views vis obgyn 2015;7(1);17-24
- 13.Karmarkar pj, Wilkinson A, Rathod M. Histopathological evaluation of post-menopausal bleeding.j dent.medic.sci.2014;13(10)53-7.