

Frequency of the Factors Leading to Postmenopausal Bleeding

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ABSTRACT

Aim: Aim of this study is to evaluate the frequency of factors underlying postmenopausal bleeding in local population.

Study design: A cross sectional study

Duration and place: Department of obstetrics and gynecology of Bakhtawar Amin Trust Hospital Multan from 14th April 2019 to 14th April 2020.

Methodology: The study included 130 patients who fulfilled inclusion criteria. Demographic data including period of complain and age was collected. Cervical smears of all subjects were taken and investigated. Transvaginal ultrasonography of all patients were also done. SPSS-IBM version 20 was used used to analyze data. P value 50.05 was considered statistically significant.

Results: Atrophic endometrium was seen in 46.2% patients, Endometritis 18.5%, Endometrial hyperplasia 10%, Endometrial carcinoma 5.4%, Cervical cancer 7.7% and Polyp was 10.8%.

Conclusion: It can be concluded that only the most frequent cause of PBM in post menopausal women was found similar to previous data, all other causes had different ranking.

Keywords: Post menopausal bleeding, cervical cancer, endometrial atrophy

INTRODUCTION

World Health Organization defined postmenopause as period in which menstruation has stopped. It is classified into early and late (after seventy years) menopause¹. There are several patient encounters of postmenopausal uterine bleeding, due to use of selective estrogen receptor modulator (SERM) (for instance tamoxifen adjuvant therapy) or selective estrogen receptor modulator (SERM).² Survival rates can be improved by early diagnosis, different diagnostic tools like transvaginal hysteroscopy or ultrasonography are used for early diagnosis malignancy.^{3,5} Better insurance coverage and cancer screening tools used currently have led to decreased rates of cancer prevalence. Particularly, there has been steady decrease in incidence of cervical cancer, whereas incidence of endometrial cancer has increased modestly^{6,7}. This decrease in incidence of cancer affect prevalence of factors leading to postmenopausal bleeding.

Different causes of postmenopausal bleeding include endometrial cancer, endometrial hyperplasia, cervical or endometrial polyps, hormone replacement therapy, endometrial or vaginal atrophy and other diseases. A study has shown that in females with postmenopausal bleeding frequency of endometrial carcinoma, endometrial hyperplasia, atrophic endometrium and endometritis was 30.5%, 14%, 37% and 27% respectively.⁸ Another study showed frequency of cervical cancer, polyp, atrophic endometrium and endometrial carcinoma to be 7%, 11%, 52% and 6% respectively⁹.

There is lack of local data on this subject. Most common symptom of endometrial carcinoma is post menopausal bleeding; therefore it should be investigated immediately so that endometrial carcinoma can be detected and managed early. There is variation in study results of different populations so local study must be conducted to collect evidence.

Therefore, aim of this study is to evaluate frequency of factors underlying postmenopausal bleeding in local population.

METHODOLOGY

After IRB permission a cross sectional study was conducted in the department of obstetrics and gynecology of Bakhtawar Amin Trust Hospital Multan from 14th April 2019 to 14th April 2020. Women aged between 45 - 60 years who presented with post-

menopausal bleeding were included in the study. Subjects who had HRT in last one year, had surgical, radiological or chemotherapy induced menopause and were diabetic or hypotensive were excluded from the study. The study included 130 patients who fulfilled inclusion criteria. Approval for the study was taken from the ethical committee of CPSP. Patients' data was kept confidential and informed consent was taken. Demographic data including period of complain and age was collected. Cervical smears of all subjects were taken and investigated. Transvaginal ultrasonography of all patients were also done.

SPSS-IBM version 20 was used used to analyze data. For qualitative variables including age groups, Endometrial hyperplasia, Atrophic endometrium, Endometrial carcinoma, polyp, Endometritis, and cervical cancer frequency and percentage were calculated. For quantitative variables including age, weight period if complain mean±SD was calculated. Stratification was used for effect modifiers including age, weight, Parity, marital status and duration of complain. Chi square test was used. P value 50.05 was considered statistically significant.

RESULTS

Age range in this study was from 45 to 60 years with mean age of 53.284±3.55 years, mean duration of complain was 26.292±9.49 days and mean weight was 82.515±9.42 Kg as shown in Table-I. Frequency and percentage of patients as per age groups are shown in Table-II. Atrophic endometrium was seen in 46.2% patients, Endometritis 18.5%, Endometrial hyperplasia 10%, Endometrial carcinoma 5.4%, Cervical cancer 7.7% and Polyp was 10.8% as shown in Table-III, IV,

Table- I: Mean±SD of patients on the basis of Age, period of complain and weight (n=130)

Demographics	Mean±SD
Age (years)	53.284±3.55
Duration of Complain (days)	26.292±9.49
Weight (Kg)	82.515±9.42

Table- II: Frequency and percentage of patients according to age groups (n=130)

Age Group (years)	n	%age
45-55	86	66.2%
>56	44	33.8%
Total	130	100%

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Table- III: Frequency and percentage of patients according to Atrophic endometrium (n=130)

Atrophic endometrium	n	%age
Yes	60	46.2%
No	70	53.8%
Total	130	100%

Table- IV: Percentage and Frequency of patients based on Endometritis (n=130)

Endometritis	n	%age
Yes	24	18.5%
No	106	81.5%
Total	130	100%

DISCUSSION

Common causes of postmenopausal bleeding (PMB) in women were evaluated in this study. The results of our study were different from those conducted in a Caucasian and other ethnic groups. Major causes of post menopausal bleeding was endometrial or vaginal atrophy. Among more prevalent causes were cervical and endometrial polyps while endometrial cancer was a rare cause. A study conducted in Hong Kong showed 3.8% prevalence of endometrial carcinoma in females with PBM, this is lower than the prevalence rate (10%) in developed countries¹⁰. This shows that there is much difference in the prevalence rate if endometrial cancer in Asian population.

In this study, prevalence of polyp was 10.8%, endometrial carcinoma 5.4%, cervical cancer 7.7%, endometrial hyperplasia 10%, endometritis 18.5% and atrophic endometrium was 46.2%. Another study showed that frequency of endometrial carcinoma, endometrial hyperplasia, endometritis and atrophic endometrium to be 30.55%, 14%, 26.3%, and 36.8% respectively⁸.

Another study showed frequency of atrophic endometrium, polyp, endometrial cancer and cervical cancer to be 51.1%, 11.5%, 5.7%, and 6.9% respectively⁹. A study shows that though atrophy is the most common cause of PBM, but the most concerning possible etiology is endometrial cancer¹¹. An important finding of our study is decrease in the incidence of cervical cancer over time. Different studies showed decreased rates of incidence and mortality of cervical cancer^{12,13,14}. Study conducted in US demonstrate steady decrease in this trend¹⁵. However, incidence of age standardized cervical cancer is still greater as compared to age standardized world population, it explains high ranking of cervical cancer in causes of PMB.

There are few limitation of our study. Study sample was from single tertiary care center. As cancer patients are referred to tertiary centers for better medical care so selection bias maybe present. Nevertheless, higher ranked factors of PMB were not significantly affected as number of gynecologic malignancies were not higher.

CONCLUSION

It can be concluded that only the most frequent cause of PBM in post menopausal women was found similar to previous data, all other causes had different ranking. An interesting new finding was cervical cancer was ranked at fifth position, which shows greater percentage as compared to previous Western studies.

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