PREVALENCE AND PATTERNS OF POST MENOPAUSAL BLEEDING AT THE NNAMDI AZIKIWE UNIVERSITY TECHING HOSPITAL, NNEWI, NIGERIA: A 5 YEAR REVIEW

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ABSTRACT

BACKGROUND

OBJECTIVES

To determine the prevalence and patterns of postmenopausal bleeding.

Materials and methods:

This was a retrospective study conducted on all the cases of postmenopausal bleeding managed at Nnamdi Azikiwe University Teaching Hospital Nnewi between 1st January 2014 and 31st December 2018. Data was obtained from the case notes retrieved from the medical records department and from gynecological ward and clinic registers. The information obtained included age, parity, year since menopause, history of hypertension and diabetes mellitus, time of onset of postmenopausal bleeding, duration of bleeding, bleeding frequency, and subjective measurement of bleeding and histological diagnosis. Data analysis was done using SPSS version 21.

Results:

Out of the 1640 gynaecological admissions, 53 were for postmenopausal bleeding, giving a prevalence of 3.2% for postmenopausal bleeding. A total of 46 out of the 53 case files were retrieved from medical, and were used for further analysis. Twenty-two (47.8%) were found in women between the ages of 55 to 65years. The majority of the cases 58.7% were found amongst the grandmultipara. Majority (82.6%) of the documented cases, were found in women who have been menopausal for at least 12 months and only one case was reported in women menopausal for less than 12 months. History of hypertension and diabetes mellitus were found in 11 (23.9%) and 7 (15.2%) of the women respectively. PMB was first noticed at least 6 months postmenopausal in 24 (52.3%). Recurrent PMB was experienced by 38 (82.6 %) of the women in the study while 3 (6.5%) presented with a single episode. Subjective estimation of bleeding revealed that 20 (43.5%) of the patients used in the study had either slight or heavy bleeding. Histological diagnosis showed that squamous cell carcinoma of the cervix and other histological types of cervical malignancies accounted for 12 (26.1%) and 7 (15.2%) of all histological diagnoses, respectively.

Conclusion:

In conclusion, PMB is a common gynecological presentation in our environment. It is closely associated with diabetes mellitus and hypertension with the leading cause in our climes being cervical malignancy which is largely preventable. Therefore, health policies should be targeted towards medical education, lifestyle

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modification, screening, prevention and early treatment of cancer of the cervix.

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INTRODUCTION

Postmenopausal bleeding (PMB) has been described as bleeding from the genital tract after a year of cessation of menses, and in the absence of hormone replacement therapy (HRT)[1]. It is usually perceived as aberrant with the exception of women on HRT and results in 5%-10% of indications for referral to gynaecology clinics[2,3].

The incidence of PMB has an inverse relationship with postmenopausal years. However, the chances of malignant transformations rise with increasing age from an estimated 1% at half a century to about 25% at the age of 80 years[3–5].

The aetiology of PMB comprise vaginal atrophy, pelvic infection, HRT, uterine leiomyoma and sarcoma, endometrial pathology, malignancies of the cervix, ovary, vagina and vulva, trauma and bleeding disorders. Overall, the commonest causes of PMB are non-malignant however, it is adjudged to be a clinical indicator of urogenital, haematological and gastrointestinal malignancies[3,6].

The template for the evaluation of PMB stems from it being a marker for gynaecological malignancies and other pathologies, chief amongst which is endometrial cancer (EC). Notes reflecting the menstrual history, parity, co-morbidities, drug and family history should be obtained. Measures to confirm the source of bleeding such as a digital rectal examination is indicated. Complete abdomino-pelvic, bimanual and speculum examinations may be of added value. The other investigative techniques specific for endometrial pathologies include transvaginal ultrasonography, saline sonography, endometrial sampling and direct visualization of the uterine cavity with hysteroscopy[6–8]. This study is therefore aimed at determining the prevalence and patterns of postmenopausal bleeding in Nnamdi Azikiwe University Teaching Hospital, Nnewi, south-east Nigeria.

AIM

To determine the patterns of postmenopausal bleeding in Nnamdi Azikiwe University Teaching hospital (NAUTH) Nnewi.

OBJECTIVES

To determine the sociodemographic characteristics of post-menopausal women bleeding in NAUTH Nnewi.

To determine the presentations of postmenopausal bleeding in NAUTH Nnewi.

To determine pattern of histological diagnosis in women with post-menopausal bleeding in NAUTH Nnewi

MATERIALS AND METHODS

This is a five-year retrospective study of postmenopausal bleeding managed at Nnamdi Azikiwe University Teaching

Hospital (NAUTH), Nnewi, south-east Nigeria between 1st January 2014 and 31st December 2018. The gynaecological clinic and gynaecology ward admission registers were assessed to determine the total number of cases of postmenopausal bleeding within the study period. The case file numbers of patients that fall within the study age range were extracted from the gynaecology ward and clinic registers. The case notes were then retrieved from the medical records department of the hospital.

All cases of postmenopausal bleeding admitted in the hospital within the study period were included. They all met the inclusion criteria as none was on hormone replacement therapy and therefore none, was excluded.

The patients were analysed with respect to their sociodemographic variables, presentations, and histological diagnoses. The necessary data was extracted using proformas. Data extracted was then analysed using microsoft excel and statistical package for social sciences (SPSS) computer software version 21.

RESULTS

Out of the 1640 gynaecological admissions, 53 were for postmenopausal bleeding, giving a prevalence of 3.2% for postmenopausal bleeding. A total of 46 out of the 53 case files were retrieved from medical, giving a retrieval rate of 86.8%, and all met the inclusion criteria.

The socio-demographic variables are shown in Table 1.

Table 1: Socio-demographic variables

AGE	FREQUENCY	PERCENTAGE (%)
45 – 54 years	11	23.9
55 – 65 years	22	47.8
Above 65 years	13	28.3
PARITY		
0	6	13.0
1	4	8.7
2 to 4	9	19.6
5 and above	27	58.7
YEAR SINCE MENOPAUSE		
Less than 12 months	1	2.2
12 months and above	38	82.6
No information	7	15.2
HISTORY OF HYPERTENSION		
Yes	11	23.9
No	24	52.2
No information	11	19.6

HISTORY OF DIABETES		
Yes	7	15.2
No	28	60.9
No information	11	19.6

The lower age limit considered as menopausal was 45 years and the greatest majority of cases 47.8% were seen between 55 to 65 years.

Twenty-seven (58.7%) of the cases of post-menopausal bleeding were seen amongst the grandmultiparous women while 38 (82.6%). Almost all (82.6%) of the patients presented with PMB at least 12 months after attaining menopause.

A history of hypertension and diabetes were found in 11 (23.9%) and 7 (15.2%) of the women respectively.

Table 2 shows the presentation of postmenopausal bleeding.

Table 2: Presentations of postmenopausal bleeding

WHEN SYMPTOM WAS NOTICED	FREQUENCY	PERCENTAGE
< 6 months	18	39.1
≥6 months	24	52.2
No information	4	8.7
BLEEDING FREQUENCY		
Single episode	3	6.5
Recurrent	38	82.6
No information	5	10.9
SUBJECTIVE MEASUREMENT OF BLEEDING		
Slight	20	43.5
Heavy	20	43.5
No information	6	13

Greater than half of the patients first noted PMB at least 6 months prior to presentation. Majority, 82.6% (38) experienced recurrent bleeding while 6.5% (3) had only a single episode of bleeding. Subjective estimation of bleeding revealed that 20 (43.5%) of the patients used in the study had either slight or heavy bleeding, while the rest were not subjectively classified.

The histological diagnosis is shown in Table 3.

Table 3: Histological diagnosis

HISTOLOGY	FREQUENCY	PERCENTAGE (%)
Squamous cell carcinoma of the cervix	12	26.1
Other types of cervical cancer	7	15.2
Endometrial cancer	5	10.9
Non malignant	14	30.4
Others	1	2.2
No information	7	15.2

Majority (30.4%) of the histological reports showed benign causes. The other significant histological diagnosis was squamous cell carcinoma of the cervix which contributed 26.1%. Other cervical malignancies and endometrial cancers contributed 15.2% and 10.9% of the reports respectively.

DISCUSSION

Postmenopausal bleeding (PMB) has been described as bleeding from the genital tract after a year of cessation of menses, and in the absence of hormone replacement therapy (HRT)[1].

PMB is commonplace in gynaecological clinics[9]. In this study, the prevalence was 2.8% which was below the prevalence of 5-10% documented in previous studies[4,10]. This may be explained by poor health seeking behavior of patients and a low referral rate to tertiary facilities like NAUTH in our environment.

Majority (47.8%) of the cases occurred in ages above 55years with the dominant range 55-65years. This is akin to the findings by Choudhary and Sinha[1,4]. It therefore implies that the chances of PMB appear to diminish above the age of 65 years.

In our study, 78.3% of the patients that presented with PMB were multiparous women. However, this is above 68.6% documented by Jadoon et al., but below 86.7% recorded by Viswanathan et al[4,11]. It therefore implies that there is the possibility of a direct relationship between parity and PMB.

The incidence of PMB was found to occur more frequently after 12 months of attaining the menopausal status. This is in line with study done by Sert et al. who posited same while further concluding that the chances of PMB progressively decreases after 3 years postmenopausal[12]. This suggests that the likelihood of PMB is highest between 1-3 years postmenopausal and progressively diminishes. Therefore, efforts should be made to regularly educate and evaluate women who fall into the susceptible periods towards reducing the associated morbidity and mortality.

Previous studies have concluded that co-morbidities such as obesity, hypertension and diabetes mellitus fuel the occurrence of PMB[4,13]. A study done in Pakistan documented that diabetes was a co-morbidity in 20% of their patients[11]. This can be compared to our finding of 15.2% of the women, being diabetics. This study also revealed that 23.9% of the patients were hypertensive. However, this was significantly lower than the 36.6% (hypertensive patients with PMB) documented by Kothapally and Bhashyakaria[13]. These findings may indicate that there is an association of diabetes mellitus and hypertension with the lifetime risk of postmenopausal bleeding amongst Nigerian women.

This study found that 82.6% of the patients presented with recurrent bleeding episodes which was very similar to 80% recorded by Jadoon et

al[11]. However, this may suggest that there were delays in presentation which may be explained by poor health seeking behavior or ignorance.

In the study, the commonest malignant lesions were cervical cancers which accounted for 41.3% of all cases and 79.2% of all recorded malignancies. This is in keeping with the documentation by Ajah et al, who posited that cancer of the cervix is the commonest gynaecological malignancy in Nigeria, and is similar to 81% incidence found in a study by Behera and Sahoo[10,14]. It therefore highlights the need for a high index of suspicion of malignancies in women with PMB particularly cervical cancer in our environment. Other notable histological diagnosis was that of the endometrium with endometrial carcinoma representing 10.9% of all the cases in our study. This is similar to the findings of 10% by Ridley-Davies and Hanegem et al., in UK and Netherlands-based studies respectively, and suggests that the incidence of endometrial cancer in Nigeria is similar to that of most other parts of the world although Okunowo et al have observed a rising trend of EC in Lagos, Nigeria.[6,9,15].

LIMITATIONS:

The significant limitation of this study is that it is a retrospective study with associated average to poor documentation of some of the relevant sought information.

RECOMMENDATIONS:

Future prospective works should be done to evaluate the patterns and peculiarities of PMB in Nigeria with the view of obtaining more composite data and consequently reducing the associated morbidity and mortality.

CONCLUSION:

In conclusion, PMB is a common gynecological presentation in our environment. It is closely associated with diabetes mellitus and hypertension with the leading cause in our climes being cervical malignancy which is largely preventable. Therefore, health policies should be targeted towards medical education, lifestyle modification, screening, prevention and early treatment of cancer of the cervix. Future prospective works should be done to evaluate the patterns and peculiarities of PMB in Nigeria with the view of obtaining more composite data and consequently reducing the associated morbidity and mortality.

REFERENCES

1. Choudhary R, Sinha R. A prospective study on transvaginal doppler sonography of endometrium in women with postmenopausal bleeding. *Int J Med Biomed Stud*. 2019;3(11):83-87.
2. Sreelatha S, Jayanthi SP, Shivananjaiah C. Postmenopausal bleeding and its evaluation : Prospective study in a tertiary care center. *Int J Clin Obstet Gynaecol*. 2017;1(2):48-51.
3. Bengtsen MB, Veres K, Nørgaard M. First-time postmenopausal bleeding as a clinical marker of long-term cancer risk : A Danish Nationwide Cohort Study. *Br J*

Cancer. 2019:1-7. doi:10.1038/s41416-019-0668-2

4. Viswanathan M, Daniel S, Shailaja M, Nazeema A. Socio-Demographic Profile of Patients with Postmenopausal Bleeding Attending Out-Patient Unit of a Tertiary Care Centre. *Sch J Appl Med Sci*. 2014;2:681-684.
5. Piróg M, Kacalska-janssen O, Bereza T, Jach R. The thin red line – postmenopausal abnormal uterine bleeding with endometrial thickness less than 4 mm. *Contemp Oncol*. 2019;23(1):43-46. doi:10.5114/wo.2019.83816
6. Ridley-Davies F. Postmenopausal bleeding. *InnovAiT*. 2018;11(7):387-390. doi:10.1177/1755738018768833
7. Stravens M, Short J, Johnson K, Simcock B, Mcgeoch G, Sykes P. Management of postmenopausal bleeding by general practitioners in a community setting : an observational study. *N Z Med J*. 2016;129(1434):59-68.
8. Null DB, Weiland CM, Camlibel AR, et al. Postmenopausal bleeding : First steps in the workup. *J Fam Pract*. 2012;61(10):597-604.
9. Hanegem N Van, Breijer MC, Slockers SA, Zafarmand MH, Geomini P, Catshoek R. Diagnostic workup for postmenopausal bleeding : a randomised controlled trial. *BJOG*. 2016;(November 2014):231-240. doi:10.1111/1471-0528.14126
10. Behera R, Sahoo R. Evaluation of postmenopausal bleeding in a tertiary care hospital. *Int J Sci Res*. 2019;8(5):21-23.
11. Jadoon S, Khan S, Qadir M, Bibi N. Postmenopausal bleeding - A strong indicator of endometrial carcinoma. *Pakistan Armed Forces Med J*. 2019;69(2):368-372.
12. Sert UY, Nas T, Guler I. Frequency of the Causes of Postmenopausal Bleeding , Results of a Tertiary Referral Center in Turkey. *Gynecol Obstet Reprod Med*. 2019;25(0):1-7. doi:10.21613/GORM.2019.1007
13. Kothapally K, Bhashyakarla U. Postmenopausal bleeding : clinicopathologic study in a teaching hospital of Andhra Pradesh. *Int J Reprod Contraception, Obstet Gynaecol*. 2013;2(3):344-348. doi:10.5455/2320-1770.ijrcog20130916
14. Ajah LO, Ezeonu PO, Ozonu NC, Iyoke CA, Nkwo PO, Ajah MI. A Five Year Review of Cervical Cytology in Abakaliki, Nigeria. *Am J Cancer Prev*. 2015;3(2):23-26. doi:10.12691/AJCP-3-2-1
15. Okunowo A, Alakaloko M, Ohazurike E, Okunade K. Trend and characteristics of endometrial cancer in Lagos, Nigeria. *Gulf J Oncolog*. 2019;1(31):52-55.