

Frequency of Genital Tract Malignancies in Women with Postmenopausal Bleeding

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ABSTRACT

Aim: To determine the frequency of genital tract malignancies in women with postmenopausal bleeding

Study Design: Descriptive Cross Sectional Study.

Place and duration of study: This study was conducted at the department of obstetrics and gynecology unit III of Liaquat university hospital Hyderabad from August 2012 to July 2013.

Methods: A total of 50 cases were included in the study through non-probability convenience sampling technique. A detailed history related examinations and baseline investigation along with ultrasonography and pap smear were done. Diagnostic curettage and cervical biopsy done whenever needed & all the data was confirmed by histopathology reports. Data was recorded on predesigned proforma, entered in computer and analyzed by using SPSS-12.

Result: In this study the frequency of genital tract malignancies observed in patients with postmenopausal bleeding was 39(78%) cases. Out of which 54% had carcinoma of cervix, 10% carcinoma of endometrium, 2% Granulosa cell tumor of ovary, 6% vulval cancer, 2% vaginal cancer and 4% leiomyosarcoma.

Conclusion: Postmenopausal bleeding is a major symptom that may predict malignancy and should never be ignored and need thorough evaluation as in our country the most common malignancy is carcinoma of cervix in women with postmenopausal bleeding which reflect the importance of cervical screening programme.

Keywords: Female Genital Tract, Malignancies, Postmenopausal bleeding.

INTRODUCTION

Postmenopausal bleeding is defined as bleeding regardless of amount from the genital tract after one or more years of menopause¹. Average age of menopause in Pakistani women is 47.4 year². In UK it is 48 year but for the last century average age has been changed and it is about 51 year³.

General consensus is that postmenopausal bleeding must be considered as an indicative of malignant disease until proved otherwise and the malignancies that most commonly cause postmenopausal bleeding are carcinoma of cervix and endometrium⁴. About 90% of patients with postmenopausal bleeding have cervical cancer and 10% have endometrial cancer⁵. The endometrial carcinoma is second most common gynecological cancer with incidence of about 13/100,000 per year and death rates of 2.5/100,000 per year in European Union. The median age is 50 to 60 years and important risk factors are obesity, diabetes mellitus, nulliparity, polycystic ovarian syndrome, hormone replacement therapy (unopposed estrogen therapy),

tamoxifen, early menarche and late menopause⁶.

Patients with Postmenopausal bleeding need immediate workup even if there is a single episode of bleeding to rule out genital tract malignancies as survival of patients decreases with advanced staging so early detection of disease is important⁷. Menopause is said to occur once amenorrhea extend beyond one year⁸.

The carcinoma of cervix is the second commonest cancer among women worldwide and accounts for about 500,000 new cases diagnosed and 250,000 deaths every year. The important risk factors are human papilloma virus 16, 18, 31 and 33, early onset of coitus, multiple sexual partner, human immunodeficiency virus and smoking⁹. Other genital tract malignancies that cause postmenopausal bleeding are granulosa cell tumor of ovary, fallopian tube cancer, vaginal cancer, vulval cancer and leiomyosarcoma which rarely occur with frequency of 1-2%, 0.3%, 0.7%, 3.3% and 0.67% per 100,000 postmenopausal women respectively¹⁰. According to study of 328 patients with Post-menopausal bleeding was carried out in department of gynecology and obstetrics, Jinnah postgraduate medical center Karachi, the malignancy was most common cause (76%) of postmenopausal bleeding between 66 to 85

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years of age and the carcinoma of cervix was the commonest malignancy¹¹.

The objective of the study was to determine the frequency of hypertension during pregnancy.

PATIENTS AND METHODS

This cross sectional descriptive study was conducted in the Department of Obstetrics and Gynecology unit III of Liaquat university hospital Hyderabad. Pakistan from August 2012 to July 2013. Study population was all patients with postmenopausal bleeding. The study sample was calculated of 50 patients. The sample was determined by using non-probability convenience sampling technique.

Inclusion Criteria: All patients with postmenopausal bleeding irrespective of marital status, and parity, and age range from 45 to 80 years.

Exclusion Criteria: Postmenopausal women with bleeding disorder, postmenopausal women using hormone replacement therapy & women with postmenopausal bleeding due to benign lesion i.e polyp, chronic cervicitis, atrophic endometrium, senile vaginitis, leiomyoma and endometrial hyperplasia.

Data Collection Procedure: Data was collected by using self-structured questionnaire comprising of open and closed-ended questions covering all study variables.

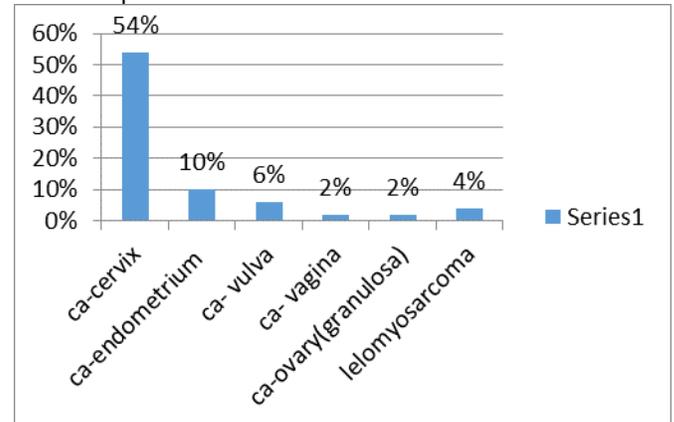
Data Analysis: The complete data was entered and analyzed on SPSS version 12. Frequency in percentage was computed for all variables. Mean and standard deviation was computed for quantitative variables like age, parity and menopause duration.

RESULT

Mean age of patients was 58.83 ± 7.5 with range 35 years. In this study the frequency of genital tract malignancies was found 78% (39 cases) out of which carcinoma of cervix was found in 27(54%) cases, carcinoma of endometrium in 5(10%) cases carcinoma of vulva in 3(6%), leiomyosarcoma in 2(4%), granulosa cell tumor of ovary in 1(2%) and carcinoma of vagina in 1(2%) cases and these malignancies approved by histopathology. Mean menopausal duration of patients observed was 11 ± 4.78 ranging 29 years (from 1-30 years) & the frequency of genital tract malignancies was more in pts presenting with Post-menopausal bleeding from 1-10 years after the onset of menopause. During this study 12 (24%) presented with only Postmenopausal bleeding, while 23(46%) presented with postmenopausal bleeding along with offensive vaginal discharge. Postmenopausal bleeding with offensive vaginal discharge and pelvic pain were present in 4(8%) patients. In this study 27(54%)

women with genital tract malignancies especially: carcinoma of cervix had risk factor of early marriage and early onset of sexual activity, while 5(10%) had obesity, 2(4%) had diabetes, 4(8%) were smokers and 1(2%) had family history of breast cancer. Only 6(12%) presented with profuse vaginal bleeding & Hb was $<5\text{gm\%}$ while 24(48%) cases presented with moderate bleeding & Hb ranged from 8-9.5gm/dl while 9(18%) pts presented with scanty bleeding. Pap smear & diagnostic curettage done in all cases. Cervical biopsies were taken in 27(54%) b/c of clinically obvious lesions. In 3(6%) vulval biopsy & in 1(2%) vaginal biopsy were also taken. In this study 9(18%) cases presented with stage I, 20(40%) with stage II, 6(12%) with stage III & 4(8%) with stage IV disease. In this study 3(6%) malignant cases underwent surgical treatment TAH & BSO. 6(12%) patients had received surgical treatment followed by Radiotherapy, out of which 1 patient underwent radical Hysterectomy.

Figure: Frequency & Type of Genital Tract Malignancy in Postmenopausal Women



DISCUSSION

In this study the frequency of genital tract malignancies was found 39(78%) cases, A study on similar issue was done by Khadija¹² on 180 patients at Lady Wellington hospital Lahore which also showed highest incidence of cervical carcinoma among malignant lesion in patients presented with postmenopausal bleeding which was 25.55% and second highest malignancy was endometrial carcinoma which was present in 14.44%. In all these studies it is clearly observed that carcinoma of cervix is the highest recorded malignancy among women presenting with postmenopausal bleeding which is consistent with our results. Ratio between carcinoma of cervix and carcinoma of endometrium in this study is 3:2, so the ratio of cervical malignancy is high and this also correlated with the reports from other

developing countries as well^{13,14}. This is the sharp contrast with the industrialized world where the incidence of endometrial cancer and carcinoma of cervix has decreased. Similarly Thomas Gred Mark et al conducted a study on a series of 457 patients and conclude as incidence of endometrial carcinoma was 8% while carcinoma of cervix was 6%¹⁵. So the decrease in the number of patients with carcinoma of cervix in developed countries is due to the implementation of effective and well organized screening programme. It has been suggested in one study that the screening at an interval of 3 years for women aged between 35-64 years can reduce the incidence of cervical cancer 90% and is cost effective¹⁶. Particularly in those who have not been screened regularly 80% of the 46,000 cases of cervical cancer occur annually in developing countries, while just 5% of the female population had a pap smear within 5 year. In contrast in the industrialized world 85% had at least one pap smear in their life time that is why cervical cancer is 10th leading cancer death in these countries¹⁷. So the importance of cervical screening test can easily be judged especially in our country where more than 90% of the patients with invasive carcinoma have never had a pap smear.

Importance of cervical screening test can also be realized by a study done in Israel¹⁸ on series of 226 patients and in the study no cervical malignancy was recorded. A study of 328 cases of postmenopausal bleeding was conducted also showed the lowest frequency of malignancies including vaginal cancer (0.9%), vulval (1.2%), leiomyosarcoma (0.32%) and Granulosa cell tumor of the ovary (0.6%). Similarly a study of 245 cases of postmenopausal bleeding was conducted showed lowest frequency of genital tract malignancies including vaginal (1.4%) carcinoma, vulval carcinoma (1.9%), Fallopian tube carcinoma (0.8%) and granulose cell tumor of ovary (1.2%)¹⁹.

CONCLUSION

Postmenopausal bleeding remains a major symptom that may predict genital tract malignancy and needs thorough evaluation. In our country the most common malignancy noticed in cases presented with postmenopausal bleeding is cervical carcinoma and it reflects the importance of implementation of effective cervical screening programme, as everywhere in the world the frequency of death rates from cervical

carcinoma has decreased with implementation of an active screening programme.

REFERENCES

1. Hard WW, Berck TS, Adashi E, Hillard PA. Menopause 12th ed. Novak's gynaecology 1996:981-1011.
2. Noorani KJ, Siddiqui N, Farzana. Age of natural menopause in Pakistani women. Jcoll physicians surg pak 1998 ; 8: 227-29.
3. Nick Panay. Menopause and the postmenopause women. In : Edmonds editor. Dewhurt's text book of obstetrics and gynaecology 7th ed. oxford:Black well science; 2007: 479-95.
4. Choo Yc, Mak KC, Hsu C , Wong TS, Ma HK. Postmenopausal uterine bleeding of non-organic cause .Obstet Gynecol 1985 ; 66: 225-28.
5. Wong SF, Luk KL, Wing AYK, Tang LCH. Finding in the women with postmenopausal bleeding investigated with hysteroscopy. J Obstet Gynaecol 2001;21(4): 392-95.
6. Lacy CG. Disorders of the uterine corpus. Current Obstetrics and gynaecology, diagnosis and treatment 4th ed. California LMP 1982: 245-72.
7. Bhatla N.Abnormal and excessive uterine bleeding. Jeffcoate's principles of gynaecology 5th ed. London 2001:560-80.
8. Micheal E.L. Peterson. Menopause and Hormone replacement therapy. Obstetrics and gynaecology. An evidence- based text for MRCOG. London 2004:600-605.
9. Sasieni P,Adams J and Cuzick, Benefits of cervical screening at different ages: evidence from the UK audit of screening histories. Br J Cancer 2003;89:88-93.
10. Dina R, Soutter P, Thomas H. Malignant diseases of vulva and vagina. In:Shaw RW, Suotter WP, Stanton SL, eds. Gynaecology.3rd ed. London: Churchill Livingstone;2003:615-30.
11. Liaquat NF, Noorani K. Causes of postmenopausal bleeding. A study of 328 cases Jcoll physician surg Pakistan 2000; 10(4):134-7.
12. Asaf KH, Samina Hamid. Cause of postmenopausal bleeding. Pak J Obstet Gynaecol 1997; 10 (3): 22-26.
13. Rarkin DM, Whelan SL, Ferlay J. Cancer incidence in five continents. International Agency for research on cancer. IARC 1997.
14. Maisonneuve P. Autier. Update on cancer control in women. Int J Obstet Gynaecol 2000; 70: 263-303.
15. Gred mark T, Kvint S, Havel G, Maltson LA. Histopathological findings in women with postmenopausal bleeding. British journal of Obstetrics and gynaecology 1995; 102:133-36.
16. IARC working group on evaluation of cervical screening programmes. Screening for squamous cervical cancer: Education of low risk after negative results of cervical cytology and its implication for screening policies Br Med J 1986;293:659-64.
17. Parkin DM , LoaraE, Muire. Estimates of worldwide frequency of 16 major cancers in 1980. In J cancer 1983;41:184-7.
18. Lidor A , Ismajovich B, Confino E, David MP. Histopathological finding in 226 women with postmenopausal uterine bleeding. Acta Obstet Gynaecol scand 1986; 65(1):41-3.
19. Alberico S, Conoscenti G, Veglio P, Bogatti P, DiBonito L, Mandruzzato G. A clinical and epidemiological study of 245 postmenopausal metrorrhagia patients. Clin Exp Obstet Gynaecol 1989;4:113-21.