ORIGINAL ARTICLE

# GENITAL TRACT MALIGNANCIES IN POSTMENOPAUSAL WOMEN

**Farkhunda Khursheed, Nasreen Jatoi, Chandra Madhu Das**

**Department of Obstetrics and Gynaecology Unit-II, Liaquat University of Medical & Health Sciences, Jamshoro, Pakistan**

**Background:** The most common malignancy in women is breast carcinoma. The next common cancer is genital tract malignancies which constitute 14% of cancers in women. Objective of this study was to determine the type and frequency of genital tract malignancy in postmenopausal women and to find the age distribution of genital tract malignancies. **Methods:** This descriptive cross sectional study was conducted in Department of Obstetrics ad Gynaecology Unit-II at Liaquat University of Medical and Health Sciences, Jamshoro. All postmenopausal women, admitted in the unit due to various pathologies (abdominal masses, bleeding P/V etc.) from January 2005 to December 2007 were included in the study. Clinical evaluation and investigations were done on all patients. Those women who had benign diseases were excluded from the study. Malignancy was confirmed from histopathology report of biopsy specimen. These women were divided into 3 age groups: group I <60 years, group II 60 to 70 years and group III >70 years. **Results:** Out of 265 postmenopausal women admitted in ward during the study period, malignancy was confirmed in 68 cases (25.66%). The type of malignancy was cervical carcinoma (41, 60.28%), ovarian carcinoma (11, 16.17%), endometrial carcinoma (8, 11.76%), vulval carcinoma (5, 7.35%) vaginal carcinoma (2, 2.94%), and leiomyosarcoma of uterus (1, 1.47%). Increased frequency of cervical and endometrial carcinomas were seen in Group-I cases, while vulval carcinoma was seen more commonly in Group-II cases ($p$=0.004). **Conclusion:** A very high frequency of cervical carcinoma was seen in our patients. There is need for more public awareness to integrate routine Gynae-Pap screening.

**Keywords:** Postmenopausal, female genital tract, malignancy, frequency, types, women, carcinoma, Pap smear

## INTRODUCTION

In this era, life expectancy of women has increased, therefore, many will experience postmenopausal period. Life expectancy is now eighty-two years for a woman living in the UK and more than 30% of women are aged 50 or above.[1] They, therefore, expect to live one third of their lives in the postmenopausal state.

The most common malignancy in women is breast carcinoma.[2] The next common cancer is genital tract malignancies which constitute 14% of cancers in women.[3] Nearly 75,000 new pelvic malignancies, involving the endometrium, ovary cervix, vagina, vulva, tubes as well as gestational trophoblastic disease and pelvic sarcoma, are being diagnosed every year.[2] Ovarian, endometrial, and vulval cancers tend to occur primarily in postmenopausal years. As the population is ageing, these malignancies will be seen more frequently.

The aim of this study was to determine the types of genital tract malignancies and to see the frequency of these malignancies in postmenopausal women and to determine the pattern of malignancies with advancing age.

## MATERIAL AND MEHODS

This descriptive study was conducted over a period of 3 years from January 2005 to December 2007 in the Department of Obstetrics & Gynaecology, Unit-II at Liaquat University of Medical & Health Sciences, Jamshoro. All postmenopausal women, admitted in the Unit for various pathologies like abdominal masses, bleeding p/v, etc. during the study period were evaluated by comprehensive history, thorough clinical examination and relevant investigations. Those women who were found to have malignant genital tract lesions were included in the study. Malignancy was confirmed from histopathology report of biopsy specimens. These women were divided into 3 age groups: Group-I included the women <60 years of age, group-II between 60–70 years of age, and group-III >70 years of age. The types of malignancies were recorded and their frequencies were noted in these age groups.

The data was processed using SPSS-11. The Pearson's Chi-square test was applied to calculate frequencies and percentages in the age groups on 95% confidence interval.

## RESULTS

A total of 265 postmenopausal women were admitted in the Department of Obstetrics and Gynaecology Unit-II from January 2005 to December 2007. The overall frequency in postmenopausal women was found to be 25.66%. Cervical carcinoma was the most common malignancy in 41 (60.28%) of the total patients during the study period. The second most common malignancy was ovarian carcinoma

contributing 11 (16.17%) of the total. Endometrial carcinoma was seen in 8 (11.76%), vulval carcinoma in 5 (7.35%), vaginal carcinoma in 2 (2.94%), and leiomyosarcoma uterus in 1 (1.4%) patient. (Table-1).

**Table-1: Postmenopausal women with malignancy (n=68)**

| Malignancy | Number | Percentage |
|---|---|---|
| Cervical carcinoma | 41 | 60.28 |
| Ovarian carcinoma | 11 | 16.17 |
| Endometrial carcinoma | 8 | 11.76 |
| Vulval carcinoma | 5 | 7.35 |
| Vaginal carcinoma | 2 | 2.94 |
| Leiomyosarcoma uterus | 1 | 1.47 |

Increased frequency of Cervical and endometrial carcinomas were found mostly in group-I cases, while vulval and vaginal carcinomas were found mostly in group-II cases (age 60–70 years). Ovarian malignancy showed no definite association with advancing age in this study. The highest frequency of malignancy was found in group-I cases ($p$=0.004). (Table-2).

**Table-2: Age distribution of genital tract malignancies**

| Malignancy | Age groups | | | $p$ |
|---|---|---|---|---|
| | <60 years (n=40) n (%) | 61–70 (n=20) n (%) | >70 years (n=8) n (%) | |
| Cervical carcinoma | 31 (75.6%) | 8 (19.5%) | 2 (4.9%) | 0.004 |
| Ovarian carcinoma | 3 (27.3%) | 4 (36.4%) | 4 (36.4%) | |
| Endometrial carcinoma | 4 (50.0%) | 2 (25.0%) | 2 (25.0%) | |
| Vulval carcinoma | 1 (20.0%) | 4 (80.0%) | 0 | |
| Vaginal carcinoma | 0 | 2 (100.0%) | 0 | |
| Leiomyosarcoma uterus | 1 (100.0%) | 0 | 0 | |

$\chi^2$=25.753, df=10

## DISCUSSION

Malignancy rate in post menopausal women varies from country to county.[4] In developing countries the rate is much higher. The reason of this high rate in developing countries as compared to the developed world is lack of education and awareness among the public which preclude them to seek attention more promptly. The other contributing factor may be high prevalence of human immunodeficiency virus (HIV) and human papilloma virus (HPV).[4]

The frequency of malignancy in post menopausal women was found to be 25.66% in this study which is considerably high because it was a hospital based study. The most common malignancy encountered was cervical cancer which contributed to 60.28% of overall malignancies found in post menopausal women during the study period. Cervical cancer is a common cancer in women all over the world and it is also said to be the second most common tumour in women.[5] However, in developed nations after introduction of cervical screening programme, incidence of cervical cancer has shown a dramatic decline because of detection of the disease at pre-invasive stage. A significantly reduced incidence was reported in Finland, Iceland, and Sweden.[6] Australia now has the lowest incidence and mortality rate for cervical cancer worldwide.[7] About 80% of all cases of cervical cancer annually occur in the developing counties where only 5% of the female population had a Pap smear within five years.[4] Cervical cancer is the leading cause of death in older women. In contrast to the industrialised world where 85% have had at least one Pap smear in time, cervical cancer is only the 10th leading cause of cancer death.[8] In this study, high frequency of cervical cancer was seen in women below 60 years of age. In cervical cancer, patients contract the infection in the sexually active age and develop the carcinoma few years later following menopause.[4]

Next common malignancy encountered in this study was ovarian carcinoma contributing 16.17% of overall malignant cases. Ovarian cancer is the most frequent cause of death from gynaecological malignancies in the western world.[9] The current life time risk is 1 per 48. The incidence is approximately 22 per 100,000 population, peaking at the age of 67 years.[10] In our study frequency of ovarian cancer was also seen slightly higher after the age of 60.

Endometrial carcinoma contributed to 11.76% of genital tract malignancies in postmenopausal women in this study. It is the most common malignancy in women in the western world where the life time risk of a woman to develop endometrial carcinoma is 2%.[2] Postmenopausal bleeding is an alarming sign of this malignancy and the incidence increases with delay in presentation of this symptom. The frequency of this malignancy with postmenopausal bleeding is reported to be 20.5%.[11] There is no good screening test for endometrial carcinoma. However, transvaginal ultrasound to detect endometrial thickness[12] and measurement of endometrial volume[13] can be used to predict malignancy. The peak age of endometrial carcinoma is between 56 to 65 years.[14] In our study majority (50%) of the cases of endometrial carcinoma were seen below the age of 60.

Vulval carcinoma is a rare disease accounting for 6% of gynaecological malignancies and 1% of all cancers in women with an incidence rate of 1.7/100,000.[15] The incidence varies considerably among investigators from 3–11%.[16] In this study vulval carcinoma accounted for 7.35% of genital tract malignancies in postmenopausal women. Vulval carcinoma should be a disease which is easily diagnosed because it is essentially a skin malignancy apparent to vulval inspection. Very frequently, the diagnosis of these malignancies is delayed because of delay on the part of patient as well as physician. The peak incidence of vulval carcinoma is 10 years after the menopause[15] which is found true in this study.

Vaginal carcinoma accounted for 2.94% of all genital tract malignancies found in this study. It is a rare tumour. The peak incidence of this tumour is 6th decade of life[15] which is also observed in this study.

## CONCLUSION

The results of the study showed a considerably high frequency of malignancy in postmenopausal women. The main reason for this is very high frequency of cervical cancer in these women. This indicates the lack of accessibility to modern health care facilities and absence of screening method such as Pap smear for detection of precursor lesion. There is a need for aggressive education of the doctors and awareness of the public about the screening methods.

## REFERENCES


1. Panay N. Menopause and the postmenopausal women. In: Dewhurst's Textbook of Obstetrics and Gynaecology, 7th edition. UK: Blackwell publishing; 2007.p. 479–95.
2. Guy I, Benrubi MD. Pelvic Malignancies. Available from: www.dcmonline.org/jax_medicine/1999Journals/January99/pelvicmalig.htm
3. John C, Weed JR, Clifford S, Marine MD. Seminars in Surgical Oncology. J Surg Oncol 2006;5(3):176–8.
4. Ergete W, Tesfaye A. Histopathological finding of post menopausal bleeding in Ethiopian women. Ethiop J Health Dev 2001;15(1):39–44.
5. Shafi MI. Premalignant and malignant disease of cervix. In: Dewhurst's Book of Obstetrics and Gynaecology. 7th ed. Blackwell Publishing; 2007.p. 614–24.
6. Khan A, Soomro N, Bibi A. Screening for cervical cancer: Cytology or visual inspection. Med Channel 2001;7(2):1–3.
7. Blomfield P. Management of cervical cancer. Aust Fam Physician 2007;36(3)122–5.
8. Parkin DM, Loara E, Muir CS. Estimates of the world wide frequency of sixteen major cancers in 1980. Int J Cancer 1988;41:184–97.
9. Nugent D, Salha O, Balen AH, Rutherford AJ. Ovarian neoplasia and subfertility treatments. Br J Obstet Gynaecol 1998;105:584–501.
10. Gabra H. Epithelial ovarian cancer. In: Dewhurst's book of Obstetrics and Gynaecology. 7th ed. UK; Blackwell Publishing; 2007.p. 625–35.
11. Asim SS, Akhtar AZ. Frequency of malignancy in women presenting with postmenopausal bleeding. Ann Abbasi Shahid Hosp Karachi Med Dent Coll 2004;9:506–9.
12. Epstein E, Valentin L. Rebleeding and endometrial growth in women with postmenopausal bleeding and endometrial thickness less than 5mm managed by dilatation and curettage or ultrasound follow up: a randomized controlled study. Ultrasound Obstet Gynaecol 2001;18:499–504.
13. Mansour GM, El-lamie IK, El-Kady NA, El-Mekkawi SF, Laban M, Abou-Gabal AI. Endometrial volume as predictor of malignancy in women with postmenopausal bleeding. Int. J Gynaecol Obstet 2007;99(3):206–10.
14. Naik VS, Rege JD, Jashnani KD. Pathology of genital tract in postmenopausal bleeding. Bombay Hosp J 2005. Available at: www.bhj.org/journal/2005_4703_july/html/original_pathology_250.htm
15. Luesley DM. Malignant disease of vulva and vagina. In: Dewhurst's book of Obstetrics and Gynaecology. 7th ed. UK: Blackwell Publishing; 2007.p.591–605.
16. Sugawa T, Hashimoto M, Suzuki M. Clinical aspects and treatment of vulval cancer in Japan. Asia Oceania J Obstet Gynaecol 1981;7(2):142–54.



## Address for Correspondence:

**Dr. Farkhunda Khursheed,** 315/B, HDA Kohsar Housing Society Phase-I, Latifabad, Hyderabad, Pakistan. **Cell:** +92-347-2138428

**Email:** farkhunda11@hotmail.com