A review of gynaecological oncology patients seen in Sir Ganga Ram Hospital Lahore

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ABSTRACT

Background: Gynaecological cancers represent significant source of morbidity and mortality in women. Female genital malignancies have different geographic distribution which varies from one region to another. Cervical cancer was reported to be the most common malignancy worldwide in 2008.[1] However, other literature reviews showed ovarian cancer being more common in different regions of Pakistan.[2,3] The objective of this study is to see demographic factors, signs and symptoms, prevalence, and type of tumor in the local patient population presented to a tertiary care hospital in Central Lahore.

Patients and Methods: A prospective descriptive study was carried out in Gynaecology Unit 1, Sir Ganga Ram Hospital/Fatima Jinnah Medical University Lahore. All the patients who managed with suspicion or diagnosis of Gynaecological malignancy from August 2012 till August 2017 were included in study. Case notes of all these patients were studied to determine the, age, parity, signs and symptoms and type of tumor. All data was recoded on a predesigned proforma after taking informed consent of the patients and getting approval from hospital ethical committee and was analyzed using SPSS version 20.

Results: Total of 100 patients managed for suspected or confirmed gynaecological malignancy during the study period. The most common type of malignancy was ovarian cancer present in 58 (58%) patients. Most common age group for this malignancy was 40-59 years in 24 patients (41%) and 28 (48.27) were having parity of 1 to 5. Common presentation in ovarian cancer was abdominal distension, anorexia and weight loss observed in 21 patients (36.2%). Mucinous cyst adenocarcinoma was the most common histopathology reported in 25 (43%) cases. Next most common type of malignancy was cervical cancer with prevalence of 25%; 13 (52%) were 60 years of age or above. Presenting complaint of per vaginal discharge was present in 9 (36%) out of 25 cases. Histopathology was squamous cell carcinoma in all 25 cases (25%). Uterine carcinoma being third most common malignancy was observed in 17 patients (17%). Most common age group for this cancer was above 60 years in 8 patients (47.08%) with parity of more than 4 in 13 (76.47%). Most common presenting complaint in these patients was postmenopausal bleeding found in 10 cases (58.82%). Uterine adenocarcinoma was the commonest reported histology in 15 (88.73%) of these patients.

Conclusion: This study highlights the demographic features, prevalence, signs and symptoms, type of tumor of different types of gynaecological malignancies in the local population. The identification of common modes of presentation may be helpful in early detection and diagnosis resulting in timely intervention which may improve patient outcome

Keywords:
Malignancy; gynaecological presentation; ovarian; cervical; uterine.

INTRODUCTION

Gynaecological cancers in woman carry a significant source of morbidity and mortality.[4] Female genital malignancies have a worldwide distribution with variable prevalence from one region to the other. Cervical cancer is considered to be the most common pelvic malignancy among women worldwide for which screening is widely accepted.[1] Different literatures have shown that ovarian cancer is most commonly reported malignancy in Pakistan.[2,3] Ovarian cancer has the highest mortality rate in developing countries because approximately two-thirds of the cases present at advanced stage.[5,6] A significant knowledge about the prevalence of different types of female genital malignancies and their common modes of presentation is required for early diagnosis and optimal management

which can improve patient outcome. This study aims to present the demographic features, prevalence, clinical presentation and cancer type of different gynaecological malignancies in the local population at Sir Ganga Ram Hospital Lahore.

PATIENTS AND METHODS

All patients with suspicion of gynaecological malignancy were admitted from outpatient department for further management. A detailed history and examination was carried out and relevant investigations were performed. Examination under anaesthesia, staging laparotomy, biopsies, or resectional surgery and surgicopathological staging was carried out according to stage of the disease at presentation and after all relevant investigations. Appropriate biopsy samples were sent for histopathology and were followed on. Information was recorded on a predesigned proforma for demographic details, clinical features, procedures carried out and histopathology reports. Data was entered on SPSS version 20 for analysis.

RESULTS

One hundred patients were managed during 5-year period from 2012 till 2017. The most common type of cancer was ovarian cancer in 58 cases (58%). Most common age group for this cancer being 40-59 years (41.37%) with parity of 1-5 in 28 patients (48.27%). The common presentation of ovarian malignancy was abdominal distension, anorexia and weight loss in 21 (36.2%) cases. Mucinous cystadenocarcinoma was found in 25 (43%) of cases on histopathology. Table 1 summarizes the details of patients with ovarian cancer.

Next most common type of malignancy was cervical cancer, present in 25 cases with prevalence of 25%. Thirteen (52%) women were above 60 years and per vaginal discharge was the most frequent presenting complaints reported in 9 (36%) cases. Most common type of malignancy on histopathology was squamous cell carcinoma in 25 (100%) cases. Table 2 provides the details of patients with cervical cancer.

Uterine carcinoma being third most common malignancy was found in 17 (17%) of cases. Seven (41.17%) patients were in the age group 40-59 and 8 (47.08%) were above 60 years of age. Parity of more than 4 was seen in 13 (76.47%) patients. Most common presenting complaint was postmenopausal bleeding in 10 cases (58.82%). Adenocarcinoma was reported in 15 (88.73%) cases on histopathology. Table 3 depicts the details of patients with uterine cancer.

Table 1. Distribution by age parity, presenting complaint and histopathology of patients with ovarian neoplasm (N=58)

Characteristics	No.	%
Age (years)		
10-20	4	6.89
20-39	17	29.31
40-59	24	41.37
≥60	13	22.41
Parity		
Nulliparous	14	24.14
1-5	28	48.27
>5	16	27.58
Presenting complaints		
Abdominal distension, anorexia, weight loss	21	36.2
Lower abdominal pain	15	25.86
Lower abdominal pain, feeling of mass	13	22.41
Abdominal pain and pregnancy	2	3.44
Menstrual irregularities	7	12.06
Histopathology		
Mucinous cystadenocarcinoma	25	43.1
Serous cystadenocarcinoma	13	22.41
Endometroid adenocarcinoma	6	10.34
Dysgerminoma	8	13.79
Granulosa cell tumour	2	3.44
Krukenberg tumour	2	3.44
Yolk sac tumour	2	3.44

Table 2. Distribution of cases by age, presenting complaint and histopathology of patients with cervical neoplasm (N=25)

Characteristics	No.	%
Age (years)		
20-39	2	8
40-59	10	40
≥60	13	52
Presenting complaint		
Per vaginal discharge	9	36
Heavy menstrual bleeding and post-coital bleeding	8	32
Per vaginal discharge and post-menopausal bleeding	8	32
Histopathology		
Squamous cell carcinoma	25	100

Table 3. Distribution of cases by age, parity, presenting complaint and histopathology of patients with uterine cancer (N=17)

Characteristics	No.	%
Age groups (years)		
20-39	2	11.76
40-59	7	41.17
≥60	8	47.08
Parity		
1-3	4	23.52
≥4	13	76.47
Presenting complaint		
Postmenopausal bleeding	10	58.82
Heavy menstrual bleeding	4	23.51
Lower abdominal pain and vaginal discharge	3	17.64
Type		
Adenocarcinoma	15	88.73
Leiomyosarcoma	2	11.76

DISCUSSION

The pattern of Gynaecological malignancies has varied geographic distribution. According to NCI SEER database 2007-2011, United States, the prevalence of

uterine malignancy was the highest; 47000 cases, and ovarian and cervical were next; 20 thousand and 12 thousand respectively.[7] Ovarian malignancy, however, had the highest mortality.[7] The reason behind the high mortality rates relates to the lack of symptoms resulting in late presentation of the cancer. The diagnosis in uterine cancer is made earlier as compared to other gynaecological cancers due to the presence of easily identifiable and early symptoms; most menopausal and abnormal uterine bleeding. This leads to a lower mortality rate as compared to the rate of incidence of this cancer.[8] Different researches have shown that ovarian malignancy has the highest mortality rate in developing countries because approximately two thirds of the total cases are presented at the advanced stages.[5,6]

In this study 24 (41.37%) patients of ovarian malignancy fell into the age group of 40-59 years, while in the United States, the most common age group was 35-44 years.[7] In contrast, other researches have shown that ovarian malignancy was most common in the 5th and 6th decade of life.[9]

According to this study, cervical malignancies mostly were presented in patients who were 60 years and above; 13/25 (52%) and formed the majority of the complainants. This is contrary to the evidence provided in most studies in the United States where the most common presenting age group for cervical malignancies is 35-44 years.[7] In a study carried out in India, 65% of the patients presenting with cervical malignancies were young.[5]

Human Papilloma Virus (HPV) was detected in all types of cervical cancers; whether squamous or Adinocarcinoma.[10] This represents an important turn for all cancer prevention and treatment program allowing the use of HPV which allows for increased immunity to most common cause of cervical cancer, namely, HPV subtypes 16 and 18. It is expected that there will be a further decline in the rate of mortality caused by cervical cancer as some areas with high vaccine utilization have successfully shown a decline in the incidence of high grade dysplasia by nearly 38%.[11]

Uterine cancer in our study was most common in the age group of 60 and above; 8 patients out of 17 (47.08%). Contrary to this, the most common age group presenting with uterine cancer was 35-44 years.[7] The main symptom in present study was postmenopausal bleeding in 10 out of 17 (58.82%). A similar finding as also reported in England and Wales[12] with the same symptom while in a study carried out it in the United States[7], abnormal uterine bleeding was the most common symptom; seen in more than 90% of the cases. Regarding histopathology in cervical cancers, squamous cell carcinoma was present in all 25 cases. Similar observations were seen in Nigeria.[13]

In uterine cancers, the most common histopathology was adenocarcinoma; 15 out of 17 (88.73%). A similar observation was seen in the United States[7], England and Wales.[12] In England and Wales, 88% of the histopathological findings confirmed adenocarcinoma.[12]

Results of this study suggest that in order to devise a national policy for prevention, early recognition, timely diagnosis and treatment of gynaecological malignancies, further studies need to be carried out throughout public and private sector healthcare to collect significant number of data and formulate national guidelines.

CONCLUSION

This 5-year review provides an understanding about the prevalence of different types of gynecological malignancies in local population represented at a tertiary care public sector hospital in Central Lahore. The identification of common modes of presentation will facilitate early recognition and diagnosis which will help in early intervention resulting in improved patient outcome and prognosis, hence decreasing the morbidity and mortality associated with these malignancies.

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