Frequency of Different Gynecological Cancers in Suspected Cases of Gynecological Cancers Presenting at Sheikh Zayed Hospital, Rahim Yar Khan

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ABSTRACT

Aim: To determine the frequency of different gynecological cancers (cervical, ovarian, endometrium) in suspected cases of gynecological cancers presenting at Sheikh Zayed Hospital, Rahim Yar Khan.

Study design: This one year Cross-sectional Descriptive, study was conducted at Sheikh Zayed Hospital, Rahim Yar Khan in Department of Obstetrics & Gynecology from 23-05-17 to 22-05-18.

Methodology: In this study all cases with suspected gynecological cancer due to contact bleeding and dyspareunia having age 20-60 years with parity 0-5 were included. On tissue biopsy presence of presence of hyperplastic blood vessels and malignant cells surrounded by anaplastic cells were deemed as positive.

Results: Cervical cancer was seen in 57(53.2%), ovarian in 32(29.9%) and endometrial in 18(16.9%) cases. All these types of cancers were significantly high in patients who belong to age groups 45 to 60 years, rural population, poor socioeconomic status and positive family history of gynecological cancers p value < 0.05. No significant difference was found in terms of BMI and duration of symptoms with types of cancer detected.

Conclusion: Cervical cancer were detected the most amongst all gynecological malignancies rising in our hospital and these malignancies have shown high significance in terms of higher age group, rural population, poor socioeconomic status, and prior family history of gynecological cancers.

Keywords: Gynecological malignancies, Cervical cancer, Ovarian cancer, Endometrial cancer

INTRODUCTION

Female genital carcinomas are major health problem worldwide which resulted in with serious complications and causes substantial healthcare cost. Prevalence of genital cancer varies from region to region it is as low as 12.7% to 13.4% in North America while it is high as 31.6% to 35% in sub-Saharan Africa[1-2].

Gynecological cancers are increasing in number in the recent time that can be attributed to either increase in detection rate or due to change in life style or high radiation exposure. It is seen in almost 11% of the cases admitted for gynecological reasons in Asian population. The prevalence varies across the globe and is variable between 2.8% to 17% of the cases[3-4].

Cervical cancer occurs in half a million women every year. Eighty percent of this huge number belongs to low socioeconomic countries. One of the reasons for such a huge number is lack of screening which occurs in developed countries. Almost 233000 deaths occur from cervical cancer per anum. Incidence of ovarian cancer is 4% of the total gynecological cancer with a case fatality ratio of 50 to 70 percent[5]. It is usually diagnosed in late stages, mostly at stage III and stage IV. The incidence of ovarian cancer is almost the same in both developed and undeveloped countries. The incidence of endometrial cancer is the same as that of ovarian cancer but endometrial cancers are usually diagnosed at an early stage because of the relationship among endometrial cancer, obesity and anovulation[6].

Social and economic barriers, lack of public awareness, limited access to health care, lack of health care infrastructure are among few attributes which increases the mortality in patients suffering from gynecological cancers. Review of literature has shown that attributing factors towards the development of gynecological cancer varies from region to region[7-8]. The current study was conducted with an aim to find the incidences of various gynecological cancers in district Rahim yar khan along. The study also aims to find the risk factors which may attribute towards the development of these gynecological cancers. This will help in early diagnosis and prompt treatment of various types of gynecological cancer by focusing on high risk groups. It will help in better use of limited resources by targeted approach.

However, there were many strengthening points as this study elaborated a number of gynecological malignancies as compared to one single malignancy and number of confounding variables were studied.

MATERIAL AND METHODS

This one year Cross-sectional Descriptive, study was conducted at Sheikh Zayed Hospital, Rahim Yar Khan in

Department of Obstetrics & Gynecology from 23-05-17 to 22-05-18 after getting approval from Ethical review committee. One hundred and seven patients were included in the study by convenient non probability sampling. Patient with complains of dysperunia and contact bleeding for more than three months, having age in between to 60 and parity of 0 to 5 were included in the study while pregnant females, patients with history of abnormal cytology, patients with previous history of surgery were excluded from the study. Informed written consent were taken from the eligible patients. Age, parity, family history, socioeconomic status, place of living, smoking history, duration of symptoms of the study participants were noted on the designed proforma. BMI of the participants were measured by spadiometer. Biopsy of the lesion was taken and the lesion was classified as cervical, ovarian or endometrial as per histological findings. Mean with standard deviation of the collected data (age, BMI and duration of symptoms) was analyzed through SPSS version 20. Frequency and percentage were calculated for some variables like parity, place of living (rural/urban), socioeconomic status (poor/middle/upper), smoking history, and family history. P-value ≤ 0.05 was considered as significant.

RESULTS

A total of one hundred and seven various types of gynecological cancers were detected. Mean age of presentation was 42.22±7.34 years while mean duration of symptoms was 6.08±2.41 months. Cervical cancer was seen in 57(53.2%), ovarian cancer were detected in 32(29.9%) and endometrial cancer was detected in 18(16.9%) cases. All these types of cancers were significantly high in age groups 45 to 60 years with p values of 0.01, 0.01 and 0.02 in cervical, ovarian and endometrial cancers respectively and in terms of parity only ovarian Cancer was significantly high in multiparous women, seen in 24(75%) cases (p value >0.01) as shown in table I.

Table I: Age and parity wise distribution of gynecological cancers (n=107).

Age (Years)	Type of Gynecological Cancer		
	Cervical Cancer	Ovarian Cancer	Endometrial cancer
20-44	15 (26.1%)	9 (28.1%)	6 (33.3%)
45-60	42 (73.9%)	23 (71.9%)	7 (38.9%)
Parity			
Single	28 (49.1%)	8 (25%)	11 (61.1%)
Multiple	29 (50.9%)	24 (75%)	7 (38.9%)

Table II: Frequency of gynecological cancers in relation to place of living, socioeconomic status, smoking history and family history of gynecological cancer.

Place of living	Rural	Urban
	74 (69.1%)	33 (30.84%)
Socioeconomic status	Poor	67 (62.6%)
	Middle	32 (29.9%)
	Upper	08 (7.4%)
Smoking history	Positive	Negative
	13 (12.1%)	94 (87.8%)
Family history of gynecological cancer	Positive	Negative
	34 (31.7%)	73 (68.2%)

No significant difference was found in terms of BMI and duration of symptoms with types of cancers. Rural population and patients of patients of low socioeconomic status revealed significantly high Cancer ratio in all the types of cancers with p values of 0.001, 0.01 and 0.01 in terms of cervical, ovarian and endometrium Cancer. Number of gynecological cancer cases in respect to various factors like place of living, socioeconomic status, history of smoking and family history of gynecological cancers is shown in table II.

DISCUSSION

Female genital carcinomas are major health problem with serious complications resulting in substantial healthcare burden. Prompt diagnosis and management can limit its complication as well as burden on health care system. Various risk factor attributes towards the development of gynecological cancers. In the current study we have studied the frequency of various gynecological cancers in Rahim Yar Khan district along with various risk factors which may attributes towards its development. There are a number of subset of gynecological malignancies and amongst them, cervical cancer is the most reported one. In the present study cervical cancer was seen in 57(53.2%), ovarian in 32(29.9%) and endometrial in 18(16.9%) cases. The data has shown that the cervical cancer is one of the leading cancers in women that present with per vaginal or post coital bleeding; the otherwise most common malignancy is breast cancer. The highest burden in seen in the under developed countries where the 80% of the new emerging cases are seen.

The study done by Nkyekyer K et al has shown an almost similar prevalence of cervical cancer and they found this in 57.8% of the cases.[2] In another study done by Ugwu et al from another developing country found relatively higher degree of prevalence of cervical CA and was found to be 78% of the cases and they also found ovarian CA is the second most common one which was seen in 17% of the cases[4].

The data has also supported the findings of ovarian CA is the second most common malignancy. According to a study done by Kyari et al they found this in around 27% of the cases while in another study this was seen to be in 42.4% of the cases and in both of these studies cervical CA was the most common and was observed in more than 50% of the cases; the latter study was done in a Pakistani study.[9-10] The higher detection rate of ovarian cancers is reported in the recent times and that can be attributed to more awareness in the terms of follow ups and invasive diagnostics procedures.

In the present study, regarding various types of cancers and age groups all these cancers were significantly high in age groups 45 to 60 years with p values of 0.01, 0.01 and 0.02 in cervical, ovarian and endometrial cancers. This was also seen by the studies done in the past and has shown that the higher the ages and high was the likelihood of developing cancers; though the same cut off values were not used as was in the present study but the age has shown a significant correlation with the development of all these gynecological malignancies[11-12].

Rural population revealed significantly high CA in all the types with p values of 0.001, 0.01 and 0.01 in terms of cervical, ovarian and endometrium CA and similar was seen with socioeconomic status where poor had the same p values. This was also seen by the studies that poor socioeconomic status and rural residence are prone to develop more of these malignancies as compared to their counterparts[13]. This can be explained by the factors that poor hygiene, poor residence, exposure to various oncogenic agent can lead to an increased exposures and enhances inflammatory responses; furthermore lack of follow up and improper medications can further add to the morbidity and some of these infections are associated with development of certain malignancies which was also seen in previous studies[14].

There are few limitations of this study as this study did not look for few of the confounding variables like previous oral contraceptive pill usage which can be explored further in future.

CONCLUSION

Cervical cancer is the most common cancer detected amongst gynecological malignancies and these malignancies have shown high significance in terms of higher age group, rural population, poor socioeconomic status, and positive family history of gynecological cancers.

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