

Incidence of Different Genital Tract Malignancies amongst Females: Study in Rural Population

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ABSTRACT

Background: Genital tract carcinomas are the most common sites of tumours amongst females. The few common sites include cervix, ovary and the endometrium. In the present decade, presence of advanced screening and diagnostic modalities has led to drastic decline in the incidence and mortality associated with cervical cancer. The present study was aimed to determine the incidence of malignancies in female genital tract amongst women residing in rural areas.

Materials and Methods: The present hospital based prospective observational study was conducted in the Department of Obstetrics and Gynaecology, Teerthanker Mahaveer Medical College & Research Centre, Moradabad, Uttar Pradesh (India). The demographic detail and the socio economic information were noted. The pattern and incidence of malignancy of female genital tract was noted. Biopsy specimens were obtained from all the patients and analysed histopathologically. The incidence was expressed as percentage of total value.

Results: A total of 1800 candidates reported to the institute during a period of two years. Out of which 200 patients were that of genital carcinoma. Incidence of female genital tract carcinoma was 11.1%. Approximately 67% (134 patients) of cases were that of cervical cancer and 0.5% cases (1 patient) was detected with carcinoma of fallopian tube.

Conclusion: Cervical cancer was the most universal female genital tract malignancy with ovarian cancer taking the second position. With the help of proper screening programs and medical treatment, apt and timely action should be taken to prevent the cancer progressing to advanced stage.

KEYWORDS: Carcinoma, Ovarian, Malignancy, Uterine.

INTRODUCTION

Genital tract carcinomas are the most common sites of tumours amongst females. The few common sites include cervix, ovary and the endometrium.¹ The malignancies of these are observed around the world but their distribution differs from one nation to another. There are around 70,000 new cases of uterine cancers and approximately 75,000 new cases of breast cancers that are reported in India during every year.² According to the statistics by national centre for health, cancer is the second leading reason of death amongst females between the age group between 25-44 years.³ Approximately 75% of the ovarian cancer patients generally report with advanced condition of the disease making it the leading cause of mortality.⁴

In the present decade, presence of advanced screening and diagnostic modalities has led to drastic decline in the incidence and mortality associated with cervical cancer.⁵ On the contrary, in developing countries due to presence of low resources and decreased awareness there hasn't been much improvement in the screening programmes. People amongst the rural areas do not have much access to the health care service providers due to which cervical cancer is an upsurge in the genital carcinoma in developing countries.⁶ Despite of such a frequency and incidence, there is lack of knowledge and information regarding this fearful condition. The present study was aimed to determine the incidence of malignancies in female genital tract amongst women residing in rural areas.

MATERIALS AND METHODS

The present hospital based prospective observational study was conducted in the Department of Obstetrics and Gynaecology, Teerthanker Mahaveer Medical College & Research Centre, Moradabad, Uttar Pradesh, India. All the subjects were informed about the study. The subjects signed the informed consent in their vernacular language. All the females with any gynaecological issue or complaint were enrolled in the study. The demographic detail and the socio economic information

were noted. The pattern and incidence of malignancy of female genital tract was noted. Biopsy specimens were obtained from all the patients and analysed histopathologically. The demographic data of all the patients including age, site and diagnosis were noted in a predesigned proforma. All the data obtained from the subjects was kept confidential. The record was arranged in a tabulated form and analysed using SPSS software. The incidence was expressed as percentage of total value.

Table 1: Site wise distribution of female genital cancer

Site of Tumor	No. of Cases	Percentage
Cervix	134	67
Ovary	44	22
Uterus Endometrium	9	4.5
Choriocarcinoma	6	3
Vulva	6	3
Fallopian Tube	1	0.5
Vagina	0	0
Total	200	100

Table 2: Age distribution according to site of malignancy

Age	Ovary	Cervix	Uterus
21-30	1	17	1
31-40	5	26	3
41-50	13	27	4
51-60	15	36	2
61-70	6	23	2
71-80	4	5	3
Total	44	134	15

RESULTS

A total of 1800 candidates reported to the institute during a period of two years. Out of which 200 patients were that of genital carcinoma. Incidence of female genital tract carcinoma was 11.1%.

Table 1 denotes the incidence of female genital cancer according to site. Approximately 67% (134 patients) of cases were that of cervical cancer and 0.5% cases (1 patient) was detected with carcinoma of fallopian tube. Cervical cancer was the most common female genital tract cancer. 22% of the females had ovarian cancer. There were 3% (n=6) subjects with cancer of vulva. There was no patient of vaginal cancer.

Table 2 illustrates the most common site of malignancy in different age groups. Ovary was the most commonly involved site at 51-60 years of age affecting 15 patients. Cervical cancer was common in **51-60** years of age affecting 36 patients. Uterine cancer was the least commonly involved site. There were 44 cases of ovarian cancer, 134 cases of cervical cancer and 15 cases of uterus cancer.

DISCUSSION

According to our study 67% of patients were of cervical cancer, which made it the leading group in present study. As per the study by Port Harcourt et al⁷, there were 65% of the subjects of cervical cancer. According to a study by Okeke et al, there were 66.3% patients that constituted of cervical cancer making it the leading type of cancer. In a study by kumar et al⁸ the most common genital cancer was that cervix cancer. As per Megafu, 73.1% of the genital cancers were of cervical cancers.⁹ Only 1 case (0.5%) of fallopian tube cancer was reported in the present study. As per Ajith Kumar et al¹⁰, there were 1% of all gynaecological malignancies of fallopian tube carcinomas similar to our study. Kietpeerkool¹¹ reported the incidence of genital cancers to be 0.48%. According to our study, Ovary was the most commonly involved site at 51-60 years of age affecting 15 patients. Cervical cancer was common in 51-60 years of age affecting 36 patients. Uterine cancer was the least commonly involved site. There were 44 cases of ovarian cancer, 134 cases of cervical cancer and 15 cases of

uterus cancer. The distribution pattern is different in developing and developed countries due to difference in advancements and treatment modalities.¹² According to our study, approximately 67% (134 patients) of cases were that of cervical cancer and 0.5% cases (1 patient) was detected with carcinoma of fallopian tube. Cervical cancer was the most common female genital tract cancer. 22% of the females had ovarian cancer. There were 3% (n=6) subjects with cancer of vulva. There was no patient of vaginal cancer. Our study was similar to a study by Jasawala et al¹³, where cervical cancer was the most common site of cancer. As per Nkyekyer K also¹⁴, cervical cancer was the most common cancer. According to research by Nwosu SO et al¹⁵ in Nigerian females, cervical cancer was common followed by ovarian cancer. There were few limitations of the study, which include smaller sample size and lack of appropriate period of follow up.

CONCLUSION

Cervical cancer was the most universal female genital tract malignancy with ovarian cancer taking the second position. With the help of proper screening programs and medical treatment, apt and timely action should be taken to prevent the cancer progressing to advanced stage. Knowledge and awareness about genital carcinoma is also crucial factor in prevention of spread of the condition.

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