A Clinicopathological Study of Carcinoma Cervix in a Rural Teaching Hospital

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Abstract
Background: *Cervical carcinoma is one of the leading cause of death among women worldwide. More than 80% of cervical cancer patients are diagnosed at advanced stages resulting in high mortality. The morbidity and mortality of cancer cervix is on decline due to early diagnosis and better treatment modalities, which is made possible only by effective screening methods.*
Objective: *To assess the clinicomorphological aspect of carcinoma cervix in a rural teaching hospital.*
Methods: *A total of 40 cases diagnosed as carcinoma cervix in Department of Pathology, Rajah Muthiah Medical College were taken for the study.*
Results: *Out of 40 cases, most common age group at which carcinoma cervix diagnosed was around 51-60 years. The most common histological type was found to be Large cell non-keratinizing squamous cell carcinoma.*
Keywords: *Cervical Carcinoma, Age Incidence, Clinical Presentation, Histological types.*

Introduction

Uterine cervix carcinoma is the 3rd most common cancer among females worldwide, next to breast and lung carcinoma.[1] 80% of the cases with cervical carcinoma are noticed in the rural areas.[2] More than 80% of cervical cancer patients are diagnosed at advanced stages resulting in high mortality.[3] The morbidity and mortality of cancer cervix is on decline due to early diagnosis and better treatment modalities, which is made possible only by effective screening methods.[4] The risk of developing cervical cancer has been associated with a number of factors such as age, parity, religion, socioeconomic status, educational level and sexual behaviours.[5] Cervical cancer is preventable due to easy accessibility of the primary site, availability of simple and cost-effective screening methods and its long pre-invasive period.[2] The present study was undertaken to evaluate the age incidence, clinical presentation, histological variants of carcinoma cervix patients diagnosed and managed at our tertiary care hospital.

Materials and Methods

The present study is a prospective study done for a period of 2 years from September 2019 to August 2021 conducted in Department of pathology, Rajah Muthiah Medical College, Chidambaram. All cases diagnosed as benign cases of cervix was excluded from the study. A total of 40 cases diagnosed as carcinoma cervix in the Department of Pathology, Rajah Muthiah Medical College were taken for the study.

Results

In the present study, a total of 40 cases were taken. Maximum number of malignancies were encountered in the age group of 51-60 years, 15 cases (37.5%). The youngest age of malignancy diagnosed was at 33 years and oldest was 78 years old.

Table 1: Age Incidence

S. No	Age Group (Years)	No of cases (n=40)	Percentage
1	31-40	7	17.5%
2	41-50	12	30.0%
3	51-60	15	37.5%
4	61-70	5	12.5%
5	>70	1	2.5%

Out of 40 cases, 21 cases (52.5%) comes under postmenopausal age group and 19 cases (47.5%) comes under pre-menopausal age group.

Table 2: Clinical Presentation

S. No	Clinical Presentation	No of cases (n=40)	Percentage
1	Bleeding PV	15	37.5%
2	Cervical Growth	12	30%
3	White discharge	8	20%
4	Erosion of Cervix	4	10%
5	Others	1	2.5%

Table 2 shows the distribution of clinical presentation of carcinoma cervix. The most common presentation was bleeding per vagina which is seen in maximum number of cases, 15 cases (37.5%), followed by cervical growth, 12 cases (30%), White discharge, 8 cases (20%) and Erosion of cervix, 4 cases (10%).

Table 3: Histopathological Types

S. No	Histopathological Type	Number of cases	Percentage
1	Squamous cell carcinoma- Large cell non keratinizing	36	90%
2	Adenocarcinoma	2	5%
	Well differentiated	1	2.5%
	Moderately differentiated	1	2.5%
3	Others(Poorly differentiated)	2	5%

Table 3 shows the distribution of histopathological types of carcinoma cervix. The most common type of carcinoma cervix was Squamous cell carcinoma-Large cell non keratinizing type which is seen in maximum number of cases, 36 cases (90%), followed by adenocarcinoma in 2 cases (5%) and poorly differentiated carcinoma in 2 cases (5%).
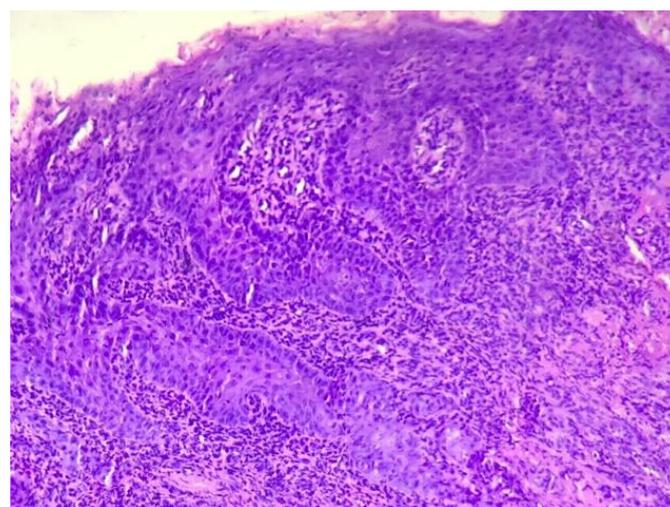
Fig - 1: Large cell non keratinizing Squamous cell carcinoma

Discussion

Carcinoma of cervix is the third most common cancer in women worldwide[6].In our present two years study, we analyse certain datas regarding to the basic clinical and pathological profile such as age, clinical presentation and histological types. The present study is conducted to understand the spectrum of carcinoma cervix in Cuddalore district, Tamilnadu. In our study, the maximum cases was contributed by the age group 51-60 years (37.5%) which was in accordance to studies

by Shetty T et al[1] and Anita kumari et al.[4] The cases ranged from 31-80 years with mean age of presentation being 51.9 years which correlates with Shetty T et al.[1] (50.5 years) and Anita kumari et al[4]. (51.17 years). Runali et al[7] and Atul Jain et al.[8] Reported the commonest age of incidence was 41-50 years. E.Vidhubala et al.[3] Reported the mean age of 39.2 years in their study. In our study most of the cases (52.5%) were seen in post-menopausal age group which was in concurrence with Shetty T et al.[1] (56%)

In our study the most common clinical presentation was bleeding per vagina (37.5%), followed by cervical growth (30%) and white discharge (20%) of cases. This was in accordance with Lakhsmi V et al.[9] Where vaginal bleeding (70.7%) was the most common presentation, followed by cervical growth (18.3%) and white discharge (4.9%). Postmenopausal bleeding was the most common type of bleeding per vagina in most of the cases. In Shetty T et al.[1] Bleeding (58.8%) was the common presentation followed by vaginal discharge (26%).

In our study Large cell Non keratinizing Squamous cell carcinoma (90%) was the most common histopathological type of carcinoma cervix, followed by Adenocarcinoma (5%) and poorly differentiated carcinoma (5%) which was in concurrence with Anita kumari et al.[4] where squamous cell carcinoma (90.85%) was most common type followed by adenocarcinoma (2.84%). Lakhsmi V et al.[9] Reported 76.8% of moderately differentiated type of squamous cell carcinoma followed by 12.1% of well differentiated type of squamous cell carcinoma. Shetty T et al[1] reported 61.71% of squamous cell carcinoma in his study.

Limitations of the Study

The evaluation of prevalence of HPV infection which could have been done with the help of p16 on immunohistochemistry (IHC) marker, to consider the role of HPV in the aetiology of the reported cervical neoplasms in the present study.

Conclusion

Cervical cancer is the most common gynaecological malignancy among women in developing countries like India, due to reduced awareness and poverty among majority of the population.More than 80% of cervical cancer patients are diagnosed at advanced stages resulting in high mortality. The key to prevent invasive cervical carcinoma is to detect any cell changes, before they become cancerous by regular pelvic examinations, PAP tests and punch biopsies. There is a need to start organized cervical screening program not only at tertiary center but also at primary health centers. Effective screening measures and early diagnosis should be done to reduce the morbidity and mortality of the disease.

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