



Original Article

Carcinoma Cervix: A Silent Disease with Loud Consequences – A Case Series

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ABSTRACT

Cervical cancer remains a significant cause of morbidity and mortality among women, particularly in low- and middle-income countries like India.

Despite the availability of effective screening and preventive strategies, a large proportion of cases continue to present at advanced stages, especially in resource-limited regions such as Kashmir.

Objectives: To analyze the clinicodemographic profile, stage at presentation, histopathological patterns, and associated risk factors of cervical cancer patients over a four-year period at a tertiary care hospital in Srinagar.

Material & Methods: A retrospective observational study was conducted at Government Medical College (GMC) Srinagar, including all diagnosed cases of cervical cancer from January 2020 to December 2024. A total of 112 patients were included in the study. Data regarding age, residence, parity, presenting complaints, stage at diagnosis (FIGO staging), histopathology, and associated risk factors were extracted from hospital records and analyzed using descriptive statistics.

Results: A total of 112 patients were analyzed, with the majority belonging to the 35–42 year age group. Most patients were from rural areas (approximately 68%). The majority presented in advanced stages, with Stage III (40%) and Stage II (35%) being the most common.

Squamous cell carcinoma was the predominant histological type (85%), followed by adenocarcinoma (12%). The most common presenting symptom was abnormal vaginal bleeding (78%), followed by vaginal discharge (72%) and pelvic pain (38%). Multiparity, early age at marriage, poor genital hygiene, and nutritional factors were commonly observed risk factors.

Conclusion: Cervical cancer in the Kashmiri population continues to present at advanced stages, reflecting gaps in screening and early detection. Strengthening awareness, implementing organized screening programs, and improving access to healthcare services are essential to reduce the burden of cervical cancer in this region.

Keywords: Cervical cancer, retrospective study, Kashmir, FIGO staging, squamous cell carcinoma.

INTRODUCTION

Cervical cancer remains a major public health problem worldwide and is one of the leading causes of cancer-related morbidity and mortality among women, particularly in low- and middle-income countries. Globally, it ranks as the fourth most common cancer among women, with a disproportionate burden in developing regions. India alone contributes a significant share of the global burden, accounting for nearly one-fifth of cervical cancer-related deaths, making it the second most common cancer among Indian women .

Despite being largely preventable through effective screening and vaccination strategies, cervical cancer continues to be diagnosed at advanced stages in many parts of India. This is primarily due to lack of awareness, inadequate screening programs, sociocultural barriers, and limited access to healthcare services. The disease often remains asymptomatic in early stages and presents later with symptoms such as abnormal vaginal bleeding, foul-smelling discharge, and pelvic pain, by which time the disease may have progressed significantly .

The epidemiology of cervical cancer in India shows that the disease commonly affects women in the age group of 35–60 years, with peak incidence in the perimenopausal period. Histologically, the majority of cases are squamous cell carcinoma (approximately 85–90%), followed by adenocarcinoma and other rare variants . Additionally, sociodemographic factors such as rural residence, high parity, early age at marriage, poor genital hygiene, and nutritional deficiencies contribute significantly to the disease burden in the Indian population.

In regions like Kashmir, geographical challenges, healthcare accessibility issues, and sociocultural factors further influence disease presentation and outcomes. Tertiary care centers such as Government Medical College (GMC) Srinagar serve as major referral hubs, often receiving patients at advanced stages of disease. Therefore, hospital-based retrospective studies provide valuable insights into the clinical and demographic profile of cervical cancer patients in this region.

Against this background, the present study was conducted to analyze the clinicodemographic characteristics, stage at presentation, histopathological patterns, and associated risk factors of cervical cancer patients over a four-year period at a tertiary care hospital in Srinagar. The findings aim to contribute to a better understanding of disease patterns in the Kashmiri population and to support the development of targeted screening and prevention strategies.

MATERIAL AND METHODS

Study design:

Retrospective observational study

Study setting:

The study was conducted in the Department of Obstetrics and Gynaecology at Government Medical College (GMC), Srinagar, a tertiary care referral center catering to patients from across the Kashmir valley.

Study duration:

The study covered a period of four years, from January 2020 to December 2024.

Study participants:

All patients diagnosed with carcinoma cervix and managed at GMC Srinagar during the study period were included. A total of 112 patients were analyzed.

Diagnosis of cervical cancer was confirmed by histopathological examination.

Patients with incomplete medical records and those with recurrent cervical cancer previously treated elsewhere were excluded from the study.

Data collection:

Approval for the study was obtained from the institutional authorities prior to data collection. Relevant information was systematically extracted from hospital records, including inpatient case files, outpatient records, oncology registers, and histopathology reports to ensure completeness and accuracy.

For each patient, the following variables were recorded:

- Age at diagnosis
- Place of residence (rural/urban)
- Parity
- Presenting complaints (abnormal vaginal bleeding, vaginal discharge, pelvic pain)
- Stage of disease at presentation (according to FIGO staging)
- Histopathological type
- Associated risk factors such as early age at marriage, multiparity, poor genital hygiene, and nutritional status

All data were compiled and organized in a structured format for analysis over the four-year study period.

Study outcomes:

The primary outcomes of the study were:

- Distribution of cervical cancer cases according to stage at presentation
- Histopathological pattern of cervical cancer

Secondary outcomes included:

- Demographic profile (age distribution, residence)
- Clinical presentation (symptom profile)
- Distribution of associated risk factors in the study population

Operational definitions:

- Cervical cancer staging: Classified according to the International Federation of Gynecology and Obstetrics (FIGO) staging system
- Multiparity: Defined as parity ≥ 3
- Rural/urban classification: Based on the patient’s recorded place of residence

Statistical analysis:

Data were entered into Microsoft Excel and analyzed using appropriate statistical software. Continuous variables were expressed as mean \pm standard deviation. Categorical variables were presented as frequencies and percentages.

RESULTS

A total of 112 patients diagnosed with carcinoma cervix were analyzed over a four-year period from January 2020 to December 2024 at Government Medical College (GMC) Srinagar. The majority of patients belonged to the 35–42 year age group, with a mean age of 38.6 ± 4.8 years. Most patients were from rural areas (68%), while 32% were from urban regions.

Regarding stage at presentation, the majority of patients presented in advanced stages, with Stage III (40%) being the most common, followed by Stage II (35%). Early-stage disease (Stage I) was seen in only 10% of patients, while 15% presented in Stage IV.

Histopathological examination revealed that squamous cell carcinoma was the predominant type (85%), followed by adenocarcinoma (12%) and other rare variants (3%).

The most common presenting complaint was abnormal vaginal bleeding (78%), followed by vaginal discharge (72%) and pelvic pain (38%). Risk factor analysis showed a high prevalence of multiparity, early age at marriage, poor genital hygiene, and nutritional deficiencies among the study population.

Table 1: Baseline Demographic Characteristics of Patients (n = 112)

Variable	Category	Value n (%)
Age (years)	Mean \pm SD	38.6 \pm 4.8
Residence	Rural	76 (67.9%)
	Urban	36 (32.1%)
Parity	>3 (Multiparous)	82 (73.2%)
	<3	30 (26.8%)

Table 2: Stage Distribution of Cervical Cancer (FIGO Staging)

Stage	Number of Patients	Percentage (%)
Stage I	11	9.8%
Stage II	39	34.8%
Stage III	45	40.2%
Stage IV	17	15.2%
Total	112	100%

Table 3: Presenting Symptoms of Patients

Symptom	Number of Patients	Percentage (%)
Abnormal vaginal bleeding	87	77.7%
Vaginal discharge	81	72.3%
Pelvic pain	43	38.4%

Table 4: Histopathological Types of Cervical Cancer

Histopathology	Number of Patients	Percentage (%)
Squamous cell carcinoma	95	84.8%
Adenocarcinoma	13	11.6%
Others	4	3.6%
Total	112	100%

Table 5: Associated Risk Factors in Study Population

Risk Factor	Number of Patients	Percentage (%)
Multiparity	82	73.2%
Early age at marriage (<18 years)	70	62.5%
Nutritional deficiency	64	57.1%

DISCUSSION

Cervical cancer continues to be a major public health concern in low- and middle-income countries, including India, where it remains one of the leading causes of cancer-related morbidity and mortality among women. As a largely preventable disease, its persistence reflects gaps in screening, awareness, and timely access to healthcare services. In this context, the present study provides insight into the clinicodemographic profile, stage at presentation, and histopathological patterns of cervical cancer patients at a tertiary care center in Kashmir.

In our study, a total of 112 cases of cervical cancer were analyzed over a four-year period. The mean age of presentation was 38.6 ± 4.8 years, with the majority of patients falling in the 35–42 year age group. This is consistent with several Indian studies, which report peak incidence of cervical cancer in the fourth and fifth decades of life. The relatively younger age at presentation in our study may reflect early exposure to risk factors such as early marriage and multiparity, which are still prevalent in certain sections of the population.

A significant proportion of patients (67.9%) in our study belonged to rural areas. This finding is in line with existing literature, where rural populations are disproportionately affected due to limited access to screening programs, lower health awareness, and sociocultural barriers. Additionally, delayed healthcare-seeking behavior and geographical constraints in regions like Kashmir may contribute to late presentation at tertiary care centers.

One of the most important findings of our study is that the majority of patients presented in advanced stages of the disease. Stage III (40.2%) was the most common, followed by Stage II (34.8%), while only 9.8% of patients were diagnosed in Stage I. This pattern is similar to other tertiary care hospital-based studies in India, where late-stage presentation is common. The high proportion of advanced-stage disease can be attributed to lack of organized screening programs, poor awareness regarding early symptoms, and delays in referral from peripheral centers.

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CONCLUSION

This four-year retrospective analysis of cervical cancer patients at Government Medical College, Srinagar highlights the continued burden of advanced-stage disease in the Kashmiri population. The majority of patients presented in Stage II and III, with only a small proportion diagnosed at an early stage. Squamous cell carcinoma was the predominant histopathological type, and abnormal vaginal bleeding was the most common presenting symptom.

A significant association was observed with modifiable risk factors such as multiparity, early age at marriage, poor genital hygiene, and nutritional deficiencies. The predominance of rural patients further underscores disparities in access to healthcare services and screening facilities.

These findings emphasize the urgent need for strengthening organized cervical cancer screening programs, increasing public awareness, and improving accessibility to early diagnostic and treatment services, particularly in rural and underserved areas. Implementation of HPV vaccination, community-based screening initiatives, and timely referral systems can play a crucial role in reducing the burden of cervical cancer.

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