Association of Clinical Presentation at Different Stages of Carcinoma Cervix

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Abstract
Background: Cancer cervix is the most common cancer in women in developing countries where screening facilities are inadequate. The incidence of cervical cancer is steadily declining in the developed world. The rate of cervical cancer is decreasing day by day due to their awareness of cervical cancer, especially its risk factors, and undertaking measure like routine screening tests. It may present with vaginal bleeding but symptoms may be absent until the cancer is in its advanced stage. This study aimed to analyze the association of clinical presentation at different stages of carcinoma cervix. **Material & Methods:** This descriptive study was conducted in Chittagong Medical College Hospital, taking 100 randomly selected patients of carcinoma cervix over one year (July 2019 to June 2020). The research protocol was approved by the research committee (Local Ethical committee). Informed written consent was taken from each patient. **Results:** Among the study subjects, most of the respondents (32, 32.0%) belonged to 51-60 years old followed by (24, 24.0%) 41-50 years and >60 years of age. Most (76, 76.0%) of the patients presented with blood-stained vaginal discharge. Significant numbers of the patient presented with foul smelling per vaginal discharge (72, 72.0%) and post-coital bleeding (68, 68.0%). Only 8% of the patients had haematuria signifying the advanced stage of the disease. Most of the patients about 72.0% sought medical advice within one year of developing symptoms. 56.0% of patients were menopausal, only 20.0% of patients had regular menstruation, and 24.0% of patients had irregular menstruation. 24.0% of patients had metrorrhagia and 2.0% of patients had dysmenorrhoea. Some degree of anemia was present in almost all patients. Only 16.0% of the patients had severe anemia 6.0% of the patients had dependent edema and 4.0% had lymphadenopathy. Most of the patients had cauliflower-type (54.0%) lesions in the cervix followed by 36.0% of patients who had the ulcerative type of growth in the cervix. Among the respondents, 96.0% of the patients had squamous cell carcinoma and only 4% had adenocarcinoma. Most (44, 44.0%) of the patients presented in the hospital with stage II ca cervix, followed by stage III (40, 40.0%). **Conclusion:** Most common presentation was blood-stained per-vaginal discharge, followed by foul-smelling per-vaginal discharge and post-coital bleeding. All the patients were clinically anemic, some showed severe anemia. The majority of the patient in this series showed a cauliflower-like lesion, followed by an ulcerative lesion. Among all patients majority (96.0%) had squamous cell carcinoma and the remaining had adenocarcinoma. Most of the patients presented in the hospital with stage II ca cervix, followed by stage III.

INTRODUCTION

Cervical cancer is a serious health problem that denotes a cancer of the cervix uterus. It may present with vaginal bleeding but symptoms may be absent until the cancer is in its advanced stage.[1] The cervix is the commonest site for female genital cancer.[2] Among women dying from malignant diseases of all kinds, cervical cancer constitutes 5%.[3] Cancer cervix is the most common cancer in women in developing countries where screening facilities are inadequate. The incidence of cervical cancer is steadily declining in the developed world.[4] The rate of cervical cancer is decreasing day by day due to their awareness of cervical cancer, especially its risk factors, and undertaking measure like routine screening tests.[5] About 12000 new cases appear every year. The scenario is alike in Bangladesh to that of other developing countries where screening program is not established.[6] Cervical cancer is a preventable condition and over 95% of patients with carcinoma cervix can be cured by early detection. Cervical cancer is believed to be a disease that develops progressively through different stages of cell changes, going from normal epithelium to invasive carcinoma. So, its early diagnosis is possible. However, in the very early stage, invasive cervical carcinoma causes no symptoms and is only discovered accidentally or as a routine search. Therefore, knowledge and awareness about exposure to risk factors are very important which will make them go for the screening test and help thereby causing early detection.[5,7] The cause of cervical cancer is yet not known but there are some risk factors. The most important risk factor in the development of cervical cancer is infection with a high-risk strain of the human papillomavirus.

The virus cancer link works by triggering alterations in the cells of the cervix which can lead to the development of cervical intraepithelial neoplasia which can lead to cancer. Women who have many sexual partners (or who have sex with men or women who had many other partners) have a greater risk.[8] The American Cancer Society provides the following list of risk factors for cervical cancer: human papillomavirus (HPV) infection, smoking, HIV infection, chlamydia infection, dietary factors, hormonal contraception, multiple pregnancies, exposure to the hormonal drug DES and a family history of cervical cancer. There is a possible genetic risk associated with HLA-B7.[9] Women with any of these factors rarely develop cervical cancer. In thinking about the factor it helps to focus on those that can be changed or avoided (for example smoking or sexual behaviors) rather than those that cannot be (Such as age, and family history). However, it is still important to know about risk factors that cannot be changed. Because it is even more important for women with those to get regular screening tests to detect carcinoma cervix early.[10] The medically accepted paradigm, officially endorsed by the American Cancer Society and other organizations, is that a patient must have been infected with HPV to develop cervical cancer, hence viewed as a sexually transmitted disease, but most women infected with high-risk HIV will not develop cervical cancer. The use of condoms reduces but does not always prevent transmission. Likewise, HPV can be transmitted by skin-to-skin contact with infected areas.[11] This study aimed to analyze the association of clinical presentation at different stages of carcinoma cervix.

OBJECTIVE

General Objective

- To analyze the association of clinical presentation at different stages of carcinoma cervix.

Specific Objectives

- To see the menstrual status among the patients.
- To see the general physical status among the patients.
- To see the macroscopic and histological types of ca cervix among the study population.

MATERIAL AND METHODS

This descriptive study was conducted in Chittagong Medical College Hospital, taking 100 randomly selected patients of carcinoma cervix over one year (July 2019 to June 2020). The patients were selected from the Gynae ward of Chittagong Medical College Hospital. After taking a careful history, and enough clinical examination cervical biopsy was taken for confirmation. After confirmation staging was done. Then cases were selected for treatment with surgery, radiotherapy, and chemotherapy as suitable for the patients. All observations were noted in the "Clinical Data Sheet". The results were calculated and interpreted through appropriate statistical analysis and presented in the table. Before the commencement of this study, the research protocol was approved by the research committee (Local Ethical committee). Informed written consent was taken from each patient. It was assured that all information and records will be kept confidential.

Inclusion Criteria

- Women of >30 years old.
- Patients who had given consent to participate in the study.

Exclusion Criteria

- Patients who did not give consent to participate in the study.
- Patients with other chronic diseases.

RESULTS

Among the study subjects, most of the respondents (32, 32.0%) belonged to 51-60 years old followed by (24, 24.0%) 41-50 years and >60 years of age. [Table 1]

Most (76, 76.0%) of the patients presented with blood-stained vaginal discharge. Significant numbers of the patient presented with foul smelling per vaginal discharge (72, 72.0%) and post-coital bleeding (68, 68.0%). Only 8% of the patients had haematuria signifying the advanced stage of the disease. [Table 2]

Table 1: Age distribution of study population (N=100)

Age (years)	N	%
31-40	20	20.0
41-45	24	24.0
51-60	32	32.0
>60	24	24.0

Table 2: Distribution of patients according to the presentation of carcinoma cervix (N=100)

Presentation	N	%
Bloodstained per vaginal discharge	76	76.0
Foul smelling per vaginal discharge	72	72.0
Post-coital bleeding	68	68.0
Metrorrhagia	24	24.0
Menorrhagia	08	8.0
Frequency of micturition	16	16.0
Spotting	08	8.0
Backache	24	24.0
Dysuria	08	8.0
Hematuria	08	8.0
Difficulty in defecation	12	12.0
Lower abdominal pain	32	32.0
Others: Vomiting Abdominal distension Leg edema Valval edema	 04 08 04 04	 4.0 8.0 4.0 4.0

Table 3: Association of presentation with different stages of ca cervix (N=100)

Presentation	Stage I (N)	Stage II (N)	Stage III (N)	Stage IV (N)
Blood-stained vaginal discharge	00	52	28	16
Foul-smelling vaginal discharge	02	40	24	12
Post-coital bleeding	02	50	18	02
Metrorrhagia	00	18	06	00
Lower abdominal pain	00	12	08	02
Hematuria	00	02	04	02
Others	00	00	06	02

Most of the patients had blood stained per vaginal discharge, foul smelling per vaginal discharge, and post-coital bleeding, in the early stages. [Table 3]

Table 4: Duration of symptoms presentation (N=100)

Duration (years)	N	%
0-1	72	72.0
1-2	20	20.0
> 2	08	08.0

Most of the patients about 72.0% sought medical advice within one year of developing symptoms. [Table 4]

Table 5: Menstrual status of patients (N=100)

Menstrual History	N	%
Menopause	56	56.0
Regular cycle	20	20.0
Irregular cycle	24	24.0
Metrorrhagia	24	24.0
Dysmenorrhoea	02	02.0

56.0% of patients were menopausal, only 20.0% of patients had regular menstruation, and 24.0% of patients had irregular menstruation. 24.0% of patients had metrorrhagia and 2.0% of patients had dysmenorrhoea. [Table 5]

Table 6: General examination status of the study population. (N=100)

General examination	N	%
Anemia		
Mild	36	36.0
Moderate	48	48.0
Severe	16	16.0
Dependent edema	06	6.0
Lymphadenopathy	04	4.0

Some degree of anemia was present in almost all patients. Only 16.0% of the patients had severe anemia 6.0% of the patients had dependent edema and 4.0% had lymphadenopathy. [Table 6]

Table 7: Macroscopic types of cervical carcinoma (N=100)

Growth in cervix	N	%
Ulcerative	36	36.0
Cauliflower	54	54.0
Endophytic	02	2.0
Fungating	06	6.0
Insignificant	02	2.0

Table 8: Histological types of carcinoma cervix (N=100)

Histological type	N	%
Squamous cell carcinoma	96	96.0
Adenocarcinoma	04	4.0

Table 9: Stages of carcinoma cervix in the study population (N=100)

Stages	N	%
Stage I	08	8.0
Stage II	44	44.0
Stage III	40	40.0
Stage IV	08	8.0

Most of the patients had cauliflower-type (54.0%) lesions in the cervix followed by 36.0% of patients had the ulcerative type growth in the cervix. [Table 7]

Among the respondents, 96.0% of the patients had squamous cell carcinoma and only 4% had adenocarcinoma. [Table 8]

Most (44, 44.0%) of the patients presented in the hospital with stage II ca cervix, followed by stage III (40, 40.0%) [Table 9]

DISCUSSION

Among the study subjects, most of the respondents (32, 32.0%) belonged to 51-60 years old followed by (24, 24.0%) 41-50 years and >60 years of age which was similar to another study.[12] In another study, 60% were below 15 years.[13] This study showed presentations of cases of cervical cancer were very variable. The most common presentations in the series were blood stained per vaginal discharge, which was about 76%. It was about 70% in a study done by Banu L.A,[13] 61% in the study by Fauzia, and 82% in the study by Mushaheda B.[14,15] Foul smelling per vaginal discharge were noted in 72% of patients. In this series, it was 40% in the study conducted by Banu L.A. 25%, in the series by Fauzia, and 74% and Mushaheda B. series.[13,14,15] In this series, 68% of patients presented with post-coital bleeding. In Banu L.A. post-coital bleeding was presenting at 30%

and Mushaheda B. at 62%.[13,15] This study showed 72% of patients sought medical advice within one year of the appearance of symptoms. 20% within 1-2 years and 8% presented after 2 years of the appearance of symptoms. These figures were 90%, 10%, and 0% respectively in Banu L.A. study.[13] Some degree of anemia was present in almost all (100%) patients, which was 98% in Banu L.A. series. 16% of the patient had severe anemia, which was 3% in Banu L.A. series.[13] In this series, 54% of growth was cauliflower-like, 36% was ulcerative and fungating 6%, 2% endophytic, and 2% was insignificant. In Mushaheda B. series 40% of the growth was ulcerative, 25% was cauliflower and 2% was endophytic, 6% fungating, and 2% growth was insignificant.[15] It was ulcerative, exophytic, and endophytic at 40%, 38%, and 18% respectively in the series by Fauzia. The ulcerative lesion was 50% in Banu L.A. series.[13,14] In this study cervical biopsy of these patients showed, 96% had squamous cell carcinoma and of different grades, 4% had adenocarcinoma. No other histological types were found, 94% and 6% respectively in Mushaheda B. series.[15] 91% squamous cell type in a study conducted by Fauzia.[14] It was in accord with other studies by Haghdel M and Devesa S.S.[16,17]

Limitations of The Study

It was not possible to identify HPV as a causative agent for cervical cancer because of a

poor socio-economic edition of the study population. Cystoscopy and IVU also could not be done due to a lack of facilities.

CONCLUSIONS

The most common presentation was blood-stained per-vaginal discharge, followed by foul-smelling per-vaginal discharge and post-coital bleeding. All the patients were clinically anemic, some showed severe anemia. The majority of the patient in this series showed a cauliflower-like lesion, followed by an ulcerative lesion. Among all patients, the majority (96.0%) had squamous cell carcinoma,

and the remaining had adenocarcinoma. Most of the patients presented in the hospital with stage II ca cervix, followed by stage III.

Recommendation

All categories of health care providers, in whatever setting they work should provide correct and consistent information to women on cervical cancer how it can be prevented, reasons for screening, and the significance and management of any abnormalities detected. Moreover, further studies should be conducted involving a large sample size and multiple centers in this regard.

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