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A Study on Current Clinical Profile of Invasive Carcinoma of Cervix

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Abstract | **Original Research Article**

Introduction: There is wide range of geographical variation in the incidence of major genital malignancies. In most of the developed countries cancer of the breast is top of the in female malignancies, where in the developing countries like Bangladesh genital malignancies is in top of the list. Of them cervical carcinoma has a great value. **Methods:** This is a descriptive type of observational study conducted during a six months study period from January 2008 to June 2008 in the oncology unit of Obs & Gynae Dept. of Bongobondhu Sheikh Mujib Medical University (BSMMU) & Dhaka Medical College among 30 patients of diagnosed ca cervix patients. After confirmation histologically as a carcinoma of cervix at all ages patients were included and All cases other than clinically confirmed carcinoma of cervix, patients with intraepithelial carcinoma of cervix (CIN) were excluded. There patients' data were collected from the patients. Biopsy was taken for histopathological evaluation. According to the decision of the board patients were treated. Finally, they were discharged with advice. After collection data were compiled and analyzed by Microsoft Excel 2007. ***Results:*** Among the patients enrolled in the study most of the patients, 33.33% were between 31-40 years age group. 90% were housewives, 100% were married with 36.67% from lower socio-economic group. Most common presentation was post coital bleeding 63.33%. Early age of 1st intercourse, 63.33% was the most identifiable risk factors. Early marriage and multiparty were 63.33% and 60% respectively. 16% patients had early menerchae and 10% had late menopause. 93.33% patients had squamous cell carcinoma. Remainder were adenocarcinoma. Two patients have liver and lung metastasis. 1 patients were treated surgically or by chemo-radiation accordion to their staging. Most were in advanced stage. ***Conclusions:*** From the above discussion an observation of the situation we find that the financial condition of almost all the patient is precarious. Illiteracy, superstitions, lack of cleanliness and malnutrition has totally covered the whole womenfolk in the rural areas of the country. Consequently, they fail to understand the early sign & symptoms of carcinoma of cervix in their body & they after neglect the catastrophe. As a result, majority of cases are diagnosed at an advanced stage.

Keywords: Cancer, Carcinvoμα, Cervix, adenocarcinoma.

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INTRODUCTION

Cancer of the cervix is the 3rd most common cancer of the gynecological cancer in women [1]. In some less developed countries like Bangladesh it is the commonest cancer in women. This situation is compounded by the fact that, in under developed countries 75% with an advanced stage, which the converse is of presentations in the developed countries where 75% early and cure can be realistically expected [2]. The highest risk for cervical cancer is found in women who are exposed sexually early with multiple partners to HPV (type 16 to 18), heavy smoking etc [1].

The most cervical cancer occurs in women between 35 and 55 years of age. 85% to 90% of cervical cancers are squamous cell carcinomas, 12% adenocarcinoma & 3% adenosquamous cell carcinoma [3]. To complicate the picture, there are three grading types of squamous cell carcinoma: a well-differentiated a moderately differentiated and a poorly differentiated. Each of them has a different grade of malignancy, with the most mature cell type having the best long term survival worst survival.

In very early stage, invasive cervical carcinoma causes no symptoms and is only diagnosed accidentally or as a result of routing search. Abnormal vaginal

bleeding or discharge is the most common symptom of invasive carcinoma; first episode of bleeding commonly follows coitus, straining at stool or any circumstance which exposes the cervix and may be slight later the loses alarmingly heavy. The discharge is at first creamy or white but subsequently dirty brown and of a particular offensive odour [4-6]. In advanced stage, patient may complains of pelvic pain, frequency of micturition, dysuria, incontinence, rectal pain, low backache, oedema of the leg, weight loss and anorexia. On examination, in early stage cervical carcinoma may appear normal, eroded or chronically infected; hardness, irregularity, bleeds on touch is suggestive signs. Infiltrative carcinoma produce enlargement, irregularity and firm consistency of the cervix eventually involved the adjacent parametria. The cardinal signs are hardness, friability, fixation and bleeds on touch. Now a days in some aspects carcinoma cervix even in advance stages, clinically are presenting with minor symptoms, like watery vaginal discharge or only heaviness in tower abdomen. So, patients do not pay hid to these problems. It is very disgraceful for these people, because in the meantime disease has already spreader locally or distally. Doctors can get limited scope for treatment [7].

Worldwide, cervical cancer accounts for about 500,000 new cases diagnosed and 250,000 deaths. The sad part is, if all these women had gone far a yearly pap test, almost none of them would have died. Of the new cases, 80% occurs in the less developed countries [8]. This situation is compounded by the fact that in underdeveloped countries 75% with an advanced stage, which is converse of presentations in the develop countries where 75% present early and cure can be realistically expected [2]. This is partly due to education & empowerment of women, so they present early because of symptoms for cervical cancer.

MATERIALS AND METHODS

This is a descriptive type of observational study conducted during a six months study period from January 2008 to June 2008. The study was conducted in oncology unit of Obs & Gynae Dept. of Bongobondhu Sheikh Mujib Medical University (BSMMU) & Dhaka Medical College among: 30 patients after admission, patients who were diagnosed as a case of carcinoma of cervix. After confirmation histologically as a carcinoma of cervix at all ages patients were included and All cases other than clinically confirmed carcinoma of cervix, patients with intraepithelial carcinoma of cervix (CIN) were excluded. Patients who was attended in outpatient department (OPD) of BSMMU hospital or Dhaka medical college hospital with the complains of irregular pervaginal bleeding, post coital bleeding, excessive vaginal discharge etc. were admitted in gynae indoor. There patients data were collected from the patients. In the meantime examination under anesthesia of them were performed for staging. Then a board was made, which was consisted of gynaecologist, Oncologist, radiotherapist & pathologist. Thirty (30) patients of carcinoma cervix were studied in the series. After taking history, thorough clinical examination as well as EUA and staging was done. Biopsy was taken for histopathological evaluation. The results of analysis of clinical presentations, presentation with different stages, duration of symptoms, risk factors, distribution of age, occupation, marital status, socio-economic status, menstrual status, examination findings, time taken for reporting diagnosis and investigation findings all are tabulated separately. According to the decision of the board patients were treated. Finally they were discharged with advice. After collection data were compiled and analyzed by Microsoft Excel 2007.

RESULT

Table 1: Distribution of age and marital status of the patients: (n=30)

SL	Age Groups (years)	Number of Cases	Percentage
01	20-30	2	6.67
02	31-40	10	33.33
03	41-50	9	30.00
04	51-60	4	13.33
05	61-70	5	16.67
SL	**Marital Status**	**Number of Cases**	**Percentage**
01	Married	30	100
02	Unmarried	0	0
03	Widow	2	6.67

This table shows distribution of different age groups in the series. Females of 31-40 years age group was predominated in the series (33.33%). Age range was 20-70 years. Mean age is 45 years. Among all thirty (30) patients are married, Two (2) were widow.

Table 2: Mode of presentations and pattern of menstrual disturbances: (n=30)

SL	Presentation	Number of Cases	Percentage
01	Blood-stained P/V discharge	12	40
02	Post coital bleeding	19	63.33
03	Foul smelling P/V discharge	14	46.67

SL	Presentation	Number of Cases	Percentage
04	Difficulty in micturition	12	40
05	Difficulty in defecation	5	16.67
06	Back pain	22	73.33
07	Post-menopausal bleeding	2	6.67
SL	**Menstrual disturbance**	**Number of Cases**	**Percentage**
01	Menorrhagia	8	26.67
02	Metrorrhagia	4	13.33
03	Spotting	4	13.33
04	Dysmenorrhoea	6	20

This table shows the most (63.33%) of the patients presented with post coital bleeding. Significant number of patient presented with foul smelling vaginal discharge (46.67%) & blood stained vaginal discharge. Back pain is presented by highest number of patients. Difficulty in micturation & defecation present in advance cases. This data also shows that most of the patient of this suffering from menorrhagia.

Table 3: Risk factors in the study population: (n-30)

SL	Risk factors	Number of Cases	Percentage
01	Age of first inter course	19	63.33
02	Multi parity (More than-4)	18	60
03	Early marriage (before 15 years)	19	63.33
04	Low socio-economic group	17	56.67
05	High risk male partner	05	16.67
06	Oral contraceptive pill	13	43.33
07	Early menarche	02	6.67
08	Late menopause	0	0
09	Smoking	04	13.33
10	Sexually transmitted disease	05	16.6

Among the 30 patients, age of first intercourse (63.33) is the most commonly identified risk factor followed by multiparty, many of them from low socio-economic group (56.67). Few of them have STD, and high-risk male partner.

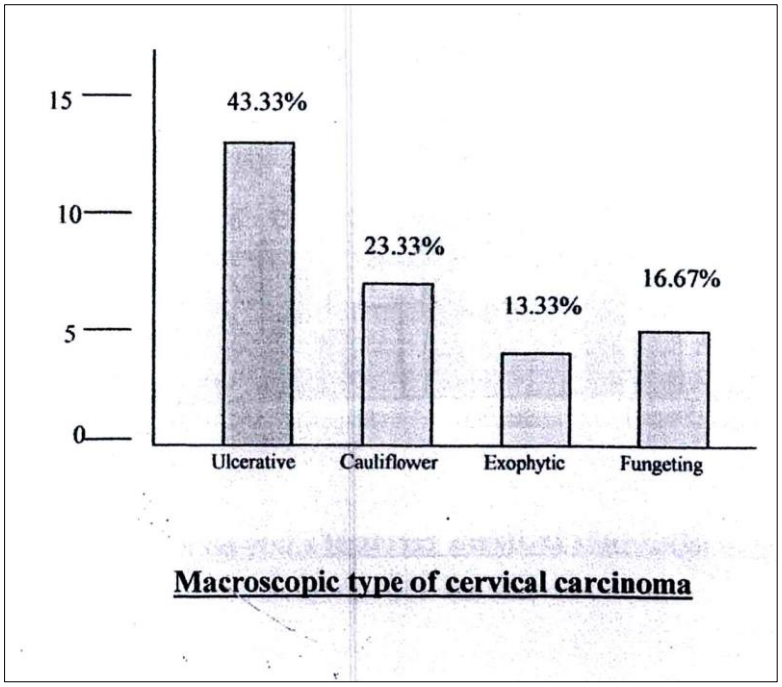

Figure 1: Macroscopic type of cervical carcinoma in study population:

This figure shows most of the patients had ulcerative lesion in the cervix

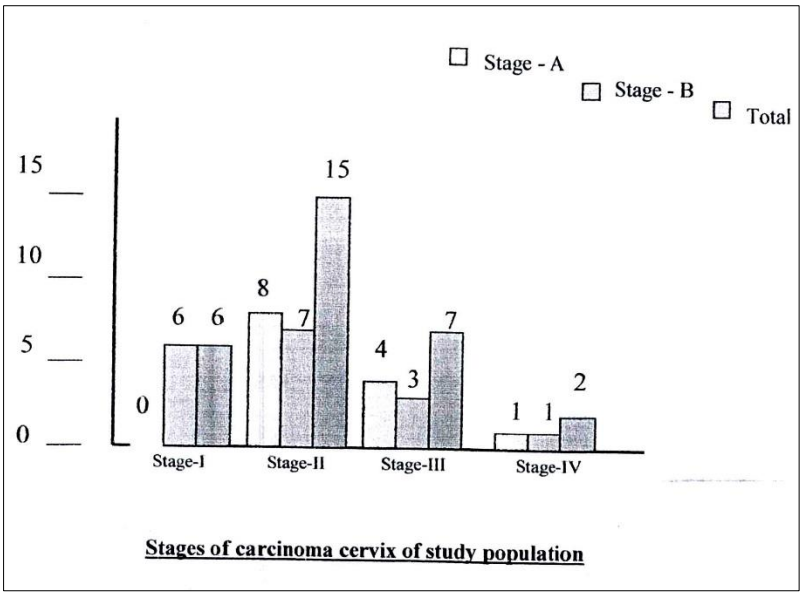

Figure 2: Stages of carcinoma cervix of study population:

This figure shows most of the patient presented in stage II.

Table 4: Histological type and grading of carcinoma cervix are presented in this study:

SL	Type of carcinoma cervix	Number of Cases	Percentage
01	Squamous cell carcinoma	28	93.33
02	Adenocarcenoma	02	6.67
SL	Grading of cervical carcinoma	Number	Percentage
01	Well differentiated	05	16.67
02	Moderately differentiated	09	30.00
03	Poorly differentiated	16	53.33

Table shows 93.33% of the patients have squamous cell carcinoma and only 6.67% has adenocarcinoma. Data also shows most of the cancer cervix of this study are poorly differentiated.

Table 5: Causes of delay in the diagnosis of the disease: (n-30)

SL	Causes	Number of Cases	Percentage
01	Negligence of the patent & her relatives	14	46.67
02	Economical crisis	03	10
03	False negativity of the screening test	04	13.33
04	Taking kabiraji or homeopathic treatment	04	13.33
05	Failure of the doctor to diagnose early	02	6.67
06	Malpractice of the doctor	01	3.33

In this study negligence was found to be main cause in diagnosis and treating the ca- cervix.

DISCUSSION

The primary objectives of this study were to find out the risk, of carcinoma cervix and to analyze the clinical presentations (sign and symptoms). This study shows presentations of cervical cancer cases were very variable. Most common presentation in the series was post coital bleeding, which is about 63.33%. It was about 30% in a study done by Banu L.A [9] and 61% in the study by Fauzia [10]. Blood stained pervaginal discharge were also noted in 40% of patients in this series which was about 30% in the study conducted by Banu L. A. Besides these, 46.67% patients presented with foul smelling per - veginal discharge, 26.67% with menorrhagia, 13.33% metrorrhagia, 73.33% with backache, difficulty in micturation (40%), difficulty in defecation (16.67%), & post menopanal bleeding (6.67%).

This study shows 50% patients sought medical advice within one year of appearance of symptoms. 30% presented between 1-2 year and 20% presented after 2 years of appearance of symptoms. These figures were 90%, 10%, 0% respectively in Banu L. A. study [9].

Among the 30 patients studied in this series early age of 1ST intercourse was the most common identified risk factor. 63.33% patients had 1ST intercourse

before 15 years of age. 10% patients had between 15 to 20 years. Early age at 1st intercourse was identified as directly related factor in the occurrence of carcinoma cervix by Fauzia [10] and Brinton L. A *et al.,* [11].

Nineteen patients had their marriage before 15 years. It was about 60% in Banu L. A [9] series, and 47% were in Roy N. N [12] prime prime series. Early age at 1st marriage was also identified as risk factor by Fauzia [10]. Seventeen patients 56.67% came from low socio-economic class, 33.33% from middle class and 6.67% from higher class (Table-4). It was 30%, 60%, and 10% respectively in Banu L. A [9] series. High prevalence of carcinoma cervix in lower socio-economic group may be due to less availability of medical facilities to poor patients as well as their ignorance illiteracy about health. Low socio-economic condition and poor personal hygiene were also identified as the risk factor by Fauzia [10].

Thirteen patients 43.33% had history of intake of steroid Oral Contraceptive Pill (OCP). Though role of OCP in the causation of cervical carcinoma is debatable, a review study on the role of steroid contraceptive hormones in the pathogenesis of invasive cervical cancer, Durban, showed steroid contraception has been postulated to be mechanism whereby HPV exerts its tumorigenic effect on cervical tissue. Steroids are thought to bind to specific DNA sequence within the transcriptional regulatory regions on the HPV DNA to either increase or suppress transcription of various genes. The role of steroids was further enhanced by the discover of hormone receptors in cervical tissue. Similar finding were also evident from other work, including Royal College and the WHO.

Exposure to HPV and HIV were not studied in this series due to lack of facilities. But there is increased risk in patients infected with HPV and HIV. There is a higher rate of persistent HPV infections in HIV positive patients, especially with oncogenic virus subtypes. Persistence of high-risk virus is necessary for the development of dysplastic lesion; therefore, there is a higher incidence of cervical intra-epithelial neplasias (CIN) and cervical cancers in HIV positive patients.

Although human papillomavirus cause essentially all cervical carcinoma, cofactors may differ by cancer histological type. This is further supported by the fact that all HPV infected woman do not develop invasive cervical cancer. In a study on "Comparison of human papillomavirus genotypes, sexual and reproductive risk factors of cervical adenocarcinoma and squamous cell carcinoma", Bethesda, Md 20892, USA showed the relative importance of human papillomavirus genotypes 16 and 18 and the reproductive co-factor differences suggest distinct causes for cervical adenocarcinoma and squamous cell carcinoma.

In the series 90% patients were anaemic, which co-relate with Banu L. A [9] series. Significant weight loss were noted in 50% patients which is as usual with other malignancies. Owing to liver metastasis 13.33% patients had jaundice. Fifteen patient had clinically palpable lymphadenopathy.

During abdominal examination, mass were found in 6.67% patients, which indirectly indicates advanced disease. 13.33% patients had ascites and jaundice each, which are also the signs of advanced stage of the disease. Advanced stage of cervical carcinoma at presentation were also shown by Banu L. A [9] and Roy N. N[12] their series. 43.33% growth was ulcerative, 13.33% were exophytic and cauliflower was 23.33% (table-13). It was 40%, 38% & 18% respectively in the series by Fauzia [10]. Ulcerative lesion was 50% in Banu L.A [9] series. There was no significant 9 growth in 3.33% patients. During per vaginal examination bleeding were noted in 40% patients and foul-smelling discharge in 46.67% patients, which were 100% and 50% respectively in Banu L.A [9] series.

Cervical biopsy of the patients showed 93.33% had squamous cell carcinoma (Table-15) of different grades.2 patients 6.67% had adenocarinoma. No other histological types were found. Squamous cell carcinoma were 91% in the study conducted by Fauzia [10] In Banu L. A [9] series of 10 patients 100% were squamous cell carcinoma.

Twenty-one patients (70%) were diagnosed clinically after first reporting, within six months. All these cases then confirmed histopathologically within short interval. After confirmation of diagnosis most of the patient under go treatment within any delay.

Causes of delay in diagnose of the disease were negligence of the patient & for relatives (46.67%), false negativity of the screening test (13.33%), economical crises (10%), taking homeopathic & kabiraji treatment (13.33%) etc. Failure of the doctor in easily diagnosis also increases the stage of the disease. Causes of delay in treatment of the disease were patients were not fit for operation or therapy (10%) taking of kabiraji as homeopathic (10%) & economical crisis of the patient. One case was maltreated by doctor.

CONCLUSION

This study analyzed the various clinical presentations, interval between symptom and clinical diagnosis, that of clinical and confirm diagnosis, that of confirm diagnosis and treatment. This study also analyzed the various causes of delay in presentation in the hospital. It was found that most of the patents presented within six (6) months of symptom production and they were also treated within six (6) months. Financial problem was one of the common cause of delay in starting treatment.

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