Pattern of Presentation of Cervical Cancer at Nnamdi Azikiwe University Teaching Hospital, Nnewi

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ABSTRACT

Background: *Cervical cancer is the second commonest cancer among women worldwide. It remains the commonest cancer cause of death among women in developing countries.*

Objectives: *This is to assess the pattern of presentation of cervical cancer in Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nnewi and to make relevant recommendation concerning screening.*

Methods: *This is a retrospective review of the case records of patients managed for cancer of the cervix between January 1st 1999 and December 31st, 2008.*

Results: *Thirty seven patients were included in the study. The mean age of the patients was 59.7 ± 13.3 years while the mean parity was 6.4 ± 3.2. Only 23.1% of the women had at least a secondary education while 46.2% had no formal education. The commonest presenting symptom was post menopausal vaginal bleeding (67.6%) followed by irregular vaginal bleeding (59.5%), watery vaginal discharge (35.1%) and post coital bleeding (16.2%). Weight loss was present in 29.7% while 10.8% had evidence of distant metastasis. The mean duration of symptom was 4.5 ± 3.6 months, and the commonest cause of delayed presentation was inability to appreciate the problem (77.8%). Only 7.1% had stage 1 disease while 46.4% had stage 3b. Complication was present in 75.7% of patients. Squamous cell carcinoma accounted for 84.2% of the cancers. Treatment was mainly palliative for these women.*

Conclusion: *Late presentation is common in our environment. Women empowerment and increased provision of cervical cancer screening are expected to reduce the burden of this disease. In resource-deprived settings, expanded training on visual inspection techniques cannot be overemphasized.*

Key words: *Cervical cancer, presentation, vaginal bleeding.*

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INTRODUCTION

Cervical cancer is the second commonest cancer among women worldwide[1]. It remains the commonest cancer cause of death among women in developing countries[2]. It has been estimated that 500,000 new cases are diagnosed yearly and it contributes to 250,000 cancer deaths every year[1]. About 80% of invasive cancers occur in developing countries[3,4] and 75% of the patients in developing countries present in with advance stage disease[1]. In contrast, more than 75% of cases present early and cure can be expected in developed countries.

The epidemiologic risk factors include early coitarche, multiple sexual partners, high parity and immunosuppression. Others include sexual transmitted diseases and smoking[4-6]. Human papilloma virus (HPV) is a prime aetiologic factor in the development of cancer[5,7]. Human papilloma virus has been shown to be present in more than 80% of cervical intraepithelial lesions and in 99.7% of all invasive cervical cancers[6]. However, majority of women infected with human papilloma virus do not develop cervical cancer.

The virus has been classified into high and low risk groups based on their malignant potential. Those implicated in cervical cancer are the high-risk group and include serotypes 16 and 18[4,5]. The disease is usually preceded by a long premalignant phase which is highly curable. Majority of the invasive cancers are squamous cell carcinoma while minority is adenocacinoma[4].

Cervical carcinoma is common between the ages of 50-69 years[8]. In Sagamu western Nigeria, the mean age at presentation was 51.7 years[8]. Abnormal vaginal bleeding is the commonest symptom. This may accompanied by a malodorous and copious vaginal discharge. Other clinical features depend on the stage of the disease. The diagnosis is usually confirmed at histology. The staging is clinical according to FIGO staging system.

Treatment options include surgery, radiotherapy and chemoradiation. The choice of treatment depends on the stage of the disease and general fitness of the patient. Cervical cancer is a largely preventive disease since the cervix exfoliates very well and is accessible for regular assessment with a preceding long premalignant phase.

The universal application of cervical screening in Europe and America had significantly reduced the incidence of invasive cancer in the population[4.]

The conventional screening test has been Papanicolaou (pap) smear. In order to reduce the errors, the automated

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Pap smear is now becoming popular in the developed countries. The use of automated Pap smear improves the sensitivity and specificity of the screening test.[10] The alternative tests to traditional Pap smear include visual inspection (unaided and aided), liquid based cytology, HPV testing, cervicograph and use of polar probes[4]. Primary prevention is targeted at prevention of HPV infection by use of vaccine.

It has been observed that organized and regular screening is superior to opportunistic screening[9]. Majority of patients with cervical cancer in developing countries present in late stage of the disease. This is because of absence of organized screening and treatment of the preinvasive lesions. This study aims to determine the pattern of presentation in our environment and to make recommendation for early detection and prompt treatment of the disease.

METHODS

This is a retrospective review of the case records of 37 patients managed for cancer of the cervix between January 1st 1999 and December 31st 2008 in Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nnewi. Their case files were retrieved from the medical records department of the hospital. Relevant information including the age, occupation, educational level, parity, clinical presentations, duration of symptoms, causes of delay before presentation, stage of the disease and histological grades were extracted. The findings were analyzed using SPSS software version 15. Only histologically confirmed cases were included in the study.

RESULTS

Thirty-seven women were diagnosed with cervical cancer within the study period. Sixty-one gynaecological cancers were diagnosed within the study period giving a prevalence of 60.7%.

The mean age of the patients was 59.7 $\pm$ 13.3 years. The age distribution is shown in table I. The major occupation of the subjects were farming 13(35.1%) and trading 12(32.4%).Two patients were homemakers while 3(8.1%) were pensioners. Five (13.5%) patients were unemployed. The mean parity was 6.4 $\pm$ 3.2. Table II shows the parity distribution. Only 23.1% of the women had at least a secondary education while 46.2% had no formal education.

The commonest presenting symptom was post menopausal vaginal bleeding (67.6%) followed by irregular vaginal bleeding (59.5%), watery vaginal discharge (35.1%) and post coital bleeding (16.2%). Weight loss was present in 29.7% while 10.8% had evidence of distant metastasis. Twenty six (76.4%) patients had complications at presentation. Table III shows the presenting symptoms. The mean duration of symptom was 4.5 $\pm$ 3.6 months. The commonest cause of delayed presentation was the patients' inability to appreciate the problem (77.8%).

Only two (5.4%) patients had stage 1 disease while 54.0% had stage 3b. Table IV shows the clinical stage of the disease. Complication was present in 75.7% of patients. Squamous cell carcinoma accounted for 84.2% of the cancers while adenocarcinoma accounted for 5 (11.5%) cervical cancer cases. Adenosquamous carcinoma was seen in only 1 (2.7%) patient.

Treatment was mainly palliative for these women.

TABLE I: AGE DISTRIBUTION

Age Range (years)	Frequency	Percentage
30-39	1	2.7
40-49	8	21.6
50-59	9	24.3
60-69	12	32.4
70-79	2	5.4
$\geq$80	5	13.5
Total	37	100

TABLE II PARITY DISTRIBUTION

Parity	Frequency	Percentage
0	2	5.4
1	3	8.1
2-4	3	8.1
≥5	29	78.4
Total	37	100

TABLE III: PRESENTING SYMPTOMS

Presenting Symptom	Frequency	Percentage
Abdominal Mass	8	21.6
Abdominal Pain	9	24.3
Haematuria	0	0
Irregular Vaginal Bleeding	22	59.5
Postcoital Bleeding	6	16.2
Postmenopausal Bleeding	25	67.5
Vaginal Discharge	13	35.1
Weight Loss	11	29.7

TABLE IV: STAGE OF DISEASE

Stage	Frequency	Percentage
1	2	5.4
2a	4	10.8
2b	3	8.1
3a	4	10.8
3b	20	54.1
4a	2	5.4
4b	2	5.4

TABLE V: HISTOLOGICAL TYPE

Type	Frequency	Percentage
Squamous Cell Carcinoma	30	81.1
Adenocarcinoma	5	13.5
Adenosquamous Carcinoma	2	5.4

DISCUSSION

Primary cancer of the cervix was the commonest gynaecological cancer in this study (58.2%). This is comparable to figures from other centres in developing countries[10-14].This confirms the pre-eminence of cervical cancer in our environment. This is rather unfortunate because cervical cancer is a preventable disease. The low number of gynaecological cancers in this study may be because of non-availability of radiotherapy in our centre. Some secondary providers may refer them directly to centres that offer radiotherapy. The mean age at presentation was 59.7±13.3 years. This is consistent with figures from other studies[11-13]. Majority of these women were of low socioeconomic class and had poor formal education. These are some of the factors that sustain the high incidence of cervical cancer noted in developing countries. Similar findings have been noted in different part of developing countries[11,15].

As was in Sokoto, Ilorin and Maiduguri, majority of the women were grandmultiparous[11,13,15]. High parity is a well-recognized risk factor for cancer of cervix. The commonest presenting symptom was vaginal bleeding (postmenopausal bleeding, 67.6%, irregular vaginal bleeding, 59.5%, postcoital bleeding, 16.2 %.).This is the commonest documented symptom of invasive cancer of the cervix[1-4]. The mean duration of symptoms in this study was 4.5±3.6months while the commonest reason for delay was inability to appreciate the magnitude of the problem. This may be because of the poor public awareness coupled with the low socioeconomic status and educational level. These two factors have been implicated in majority of the disease burden in developing countries.

Only one (2.7%) of the patients has had cervical screening in the past. The poor utilization of cervical smear screening

is a tragic story of the developing countries because of the missed opportunities of detecting and treating the premalignant lesions that invariably progress to invasive cancers[16]. This is related to the absence of organized and effective screening programme in Nigeria. Two (5.4%) patients had stage one disease while majority presented with advanced disease stage. These findings are consistent with studies from developing countries where patients present with advanced disease state. The treatment was palliative because of the late presentation.

The decline in incidence and death of women from cervical cancer in developed countries is because of organized screening and prompt treatment of pre-invasive stage of the disease. It is rather unfortunate that while the developed countries are moving from secondary prevention (cervical smear) to primary prevention (Human papilloma virus vaccines) we lack strategy /protocol in prevention of cancer of the cervix at levels. The problem is worsened by the socioeconomic and educational status of these women. By implementing the millennium development goals, these socioeconomic characteristics that make these women vulnerable will be reduced to the barest minimum.

CONCLUSION

There is need for a national and regional action on the cancer of the cervix by formulating organized screening and establishment of gynaecologic cancer centres in all the geo-political zones of the country. In the short term, training of primary and secondary healthcare providers on expanded visual inspection of the cervix will limit the disease burden. Public education on the need for life style modification, regular screening and early presentation will help to lessen the disease burden. These women are dying from a disease that is highly preventable.

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