

Nigerian Journal of Clinical Practice  
Sept. 2008 Vol 11(3):202-205

## A CLINICO-PATHOLOGICAL STUDY OF CERVICAL CARCINOMA IN SOUTH EASTERN NIGERIA; A FIVE-YEAR RETROSPECTIVE STUDY

G. O. Udigwe, C. A. Ogabido

*Department of Obstetrics and Gynaecology, Nnamdi Azikiwe University Teaching Hospital Nnewi, Nigeria.*

### ABSTRACT

**Objective :** To determine the pattern of clinical presentation of carcinoma of the cervix in Nnewi Southeast Nigeria with a view to determining strategies for intervention.

**Method :** This is a retrospective descriptive study involving all cases of clinically diagnosed carcinoma of the cervix seen over a five year period.

**Results :** Forty three case notes were available for study. The age range was 38 to 87 years with a peak age incidence of 51 to 60 years. The commonest symptom at presentation were postmenopausal bleeding (51.2%), vaginal discharge (32.6%), postcoital bleeding (9.3%) and irregular vaginal bleeding (7%). Nearly 80% presented with the advanced form of the disease with 20 (46.5%) and 14 (32.6%) presenting in stage III and IV respectively. 27( 62.8% ) were lost to follow up at various stages of management.

**Conclusion :** The pattern of presentation follow known trends. Lack of facilities for radiotherapy and loss to follow up are major obstacles in the management of carcinoma of the cervix.

**Key words:** Cervical carcinoma, pattern of presentation.

*(Accepted 26 July 2007)*

### INTRODUCTION

Carcinoma of the cervix remains the most common cancer of the female genital tract in the developing countries accounting for 60 to 70 percent of all gynaecological cancers in Nigeria.<sup>1-4</sup> Unlike malignancies of the endometrium and ovary, carcinoma of the cervix is largely preventable due to the accessibility of the cervix and hence excellent opportunity for early detection of disease. It takes as long as ten years or more for the earliest form of the disease (mild dysplasia) to progress to invasive disease.<sup>5</sup> Effective screening thus reduces morbidity and mortality in societies where screening is well established.<sup>6,7</sup>

Opportunistic screening which is practiced in Nigeria is very low.<sup>8</sup> Variable factors have been blamed for this state of affairs. These include low literacy level, poverty, ignorance, lack of equipment and dearth of trained medical personnel.<sup>9</sup> Apart from lack of established and effective screening protocol, most of the epidemiological factors associated with carcinoma of the cervix still persist in our environment. These include early marriage, multiple sexual partners, grandmultiparity and sexually transmitted infections.

Hence over the years, carcinoma of the cervix has continued to take its toll among women in developing countries due to late presentation.

In most series , more than 75 percent present in advanced stages of the disease.<sup>1,10-12</sup> In such situations, cure is no longer possible and 5 year survival rates approach zero. This is against the background of poor infrastructure and facilities for treatment in such societies like Nigeria where radiotherapy is available in very few centres.

Another dimension has been added to the story of carcinoma of the cervix with the advent of Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV/AIDS). Studies have shown that HIV infected women tend to develop cervical cancer many years earlier and tend to die earlier than HIV negative patients.<sup>13-15</sup>

We present pattern of clinical presentation of carcinoma of the cervix in our centre and the obstacles encountered in the management. It is hoped that the findings will help develop strategies for better patient management.

### MATERIALS AND METHODS

This is a retrospective study of clinically diagnosed cases of carcinoma of the cervix seen at the Nnamdi Azikiwe University Teaching Hospital Nnewi within a five year period (January 2000 to December 2004). The case notes were retrieved from medical records department and information such as age, parity, educational level, religion and age at first coitus(where available) were extracted. The age at menopause, clinical presentation, staging, histological type and the definitive treatment offered

---

Correspondence: Dr G. O. Udigwe  
E-mail: [geraldudigwe@yahoo.com](mailto:geraldudigwe@yahoo.com)

were also obtained and analysed. In our hospital, all cases of clinically diagnosed carcinoma of the cervix usually undergo examination under anaesthesia, staging and biopsy. All advanced cases are referred to University College Hospital Ibadan for radiotherapy while others are treated in our centre. During some of the period under review, the hospital did not have a full time pathologist.

## RESULTS

Forty-three cases were available for study. The age range was 38 to 87 years with a peak age incidence in the 51 to 60 years age group. 10 (23.3%) and 9 (20.9%) were in the 41 to 50 and 61 to 70 years group respectively. There is a plateau in age incidence between the age of 40 and 70 years. (see Table 1).

42 (98%) were parous while 8(18.6%) had 10 children or more. 22(51.2%) had 7 to 9 children while 11(25.6%) had 4 to 6 children.

34(79.1%) were postmenopausal at the time of presentation. 3 (7.0%) had no formal education while 30 (70.0%) had primary education and 5 (11.6%) had secondary education. None of the patients had tertiary education.

In all 8 cases where information were available, coitus started before the age of 17 years while in 3 cases it started before 13 years.

The commonest symptoms at presentation were postmenopausal bleeding (51.2%), vaginal discharge (32.6%), postcoital bleeding (9.3%), irregular vaginal bleeding (7%) and abdominal/waist pain (11.6%) (see table II). Others which included weight loss, inability to pass stool, urinary incontinence, dizziness and weakness constituted 27.9%.

Table III shows the staging of the cancer at presentation. Nearly 80% (34) presented with advanced form of the disease with 20 (46.5%) and 14 (32.6%) presenting in stage III and IV respectively.

**Table 1: Age Distribution of Patients Having Carcinoma of the Cervix.**

Age (years)	Number (%)
30 - 40	5 ( 11.6)
41 - 50	10 ( 23.3)
51 - 60	11 ( 25.6)
61 - 70	9 ( 20.9)
71 - 80	5 ( 11.6)
81+	3 ( 7.0)
<b>Total</b>	<b>43 (100)</b>

**Table 11: Clinical Presentation of Cervical Cancer**

Clinical presentation*	Number (%)
Postmenopausal bleeding	22 (51.2)
Postcoital bleeding	4 ( 9.3)
Irregular vaginal bleeding	3 ( 7.0)
Vaginal discharge	14 (32.6)
Abdominal/waist pain	5 ( 11.6)
Others	12 (27.9)

\* Some patients had more than one symptom

**Table 111: Staging of Cases of Carcinoma of the Cervix**

Stage	Number (%)
I	0 (0)
II A	2 ( 4.7)
II B	4 ( 9.3)
III	20 ( 46.5)
IV	14 ( 32.6)
Not stated	3 ( 7.0)
<b>Total</b>	<b>43 ( 100)</b>

**Table IV: Histological Types of Cervical Cancer**

Histology	Number
Large cell keratinizing squamous carcinoma	6(13.9)
Large cell non keratinizing squamous carcinoma	6(13.9)
Small cell non keratinizing squamous carcinoma	10(23.3)
Anaplastic	1(2.3)
Adenocarcinoma	2(4.7)
Not available	18(41.9)
<b>Total</b>	<b>43(100)</b>

In 25 cases where histological diagnosis were available, 22 (88.0%) were squamous cell carcinoma while 2 (4.7%) and 1 (2.3%) had adenocarcinoma and anaplastic carcinoma respectively. (see table IV) Only 2 (4.7%) had definitive treatment (surgery) in our centre while 14 (32.6%) were referred to University College Hospital Ibadan for radiotherapy. 27 (62.8%) were lost to follow up at various stages of management.

## DISCUSSION

The peak age incidence for carcinoma of the cervix in this study is 51 to 60 years which is similar to findings from many studies in Nigeria<sup>3,16</sup> although a bimodal frequency of 5<sup>th</sup> and 7<sup>th</sup> decades of life has been suggested.<sup>17</sup> 98% of the patients were parous with as many as 70% having 7 children or more. This is in keeping with the known association of carcinoma of the cervix with multiparity and findings from other parts of Africa.<sup>12</sup> In the latter study, 76% of the study population were grandmultiparous.

As many as 77% had only primary education or less. Whether this reflects the level of education among the population or that the disease occurs in people with little or no education can not be established here. Although age at first coitus was not recorded in majority of cases, it was less than 17 years in all recorded cases which is in keeping with one of the known associated factors.

The medical records and information system in Nigeria is very poor. There are no national data on most diseases including malignancies. Data available are only facility based. Due to the poor state of screening services in Nigeria, many patients only present with symptoms of complications or advanced stage of the disease. The commonest symptoms at presentation in this study were postmenopausal bleeding (51.2%) and vaginal discharge (32.6%). Others were postcoital bleeding, waist pain, weight loss, severe anaemia, urinary and faecal incontinence. Many patients presented with combination of symptoms. Most of these are features of advanced disease. This late presentation imposes a burden of care on their relations who look after them and also on the care givers.

Most of the patients are from the lower socioeconomic classes and it may be safe to assume that financial constraints contributed to delay in presentation and treatment default. This sometimes can be demoralizing for the caregivers as treatment in the hospital is on cash and carry basis. A similar situation was seen in a Lagos study.<sup>18</sup> In the Lagos study, late presentation was also attributed to delay in seeking care and care providers delay in referring patients to a tertiary health facility..

However the most vivid demonstration of the helpless state of the situation is the fact that 95% of the cases presented in stages where cure by surgery is often not applicable, with the majority (46.5% of the whole) presenting in stage III and 32.9% in stage IV. Although this type of late presentation abound in Nigeria and many parts of Africa, the figure in this study is much higher than that from other centres.<sup>1,11,12,18</sup> A study in Dar-es-salam is among the few that were very close to our figures.<sup>19</sup>

Similar to patterns all over the world,<sup>3,12,13</sup> squamous cell carcinoma is the dominant histological type of tumour with adenocarcinoma constituting about 5%. It is also important to point out that among the squamous carcinomas, the small cell non keratinizing variety with its very poor prognosis was the dominant histological type.

As our centre lacks facilities for radiotherapy which is the major form of treatment for advanced carcinoma of the cervix, as many as 14 (32.6%) were referred to University College Hospital Ibadan for radiotherapy while 27 (62.8%) were lost to follow up at various levels of investigation and treatment. Only 2 had definitive treatment (surgery). Many of those who were referred for radiotherapy do not access them because of the long distance, financial constraints and envisaged difficulties in unfamiliar environment.

Although radiotherapy may not offer a cure for advanced cancer of the cervix, it can palliate symptoms, improve wellbeing and increase significantly 5 year survival rates. It is therefore very important that facilities for radiotherapy should be established in at least each geopolitical zone or health zone of the country. This will reduce the difficulties and frustrations encountered by patients and their relations in accessing these services. This will be in addition to improving availability of and accessibility to cervical cancer screening services.<sup>20</sup> The latter will reduce the number of late presentations and thus reduce the number of those that require radiotherapy. There is also need to establish a national data bank to facilitate a coordinated approach towards the problem.

## CONCLUSION

The pattern of presentation of carcinoma of the cervix in our centre is similar to what obtains in other parts of Nigeria and Africa. Most cases present with advanced forms of the disease. Lack of facilities for radiotherapy and loss to follow up are major obstacles to management in our centre. Apart from increasing the uptake of screening services to reduce the incidence of advanced cervical cancer, there is need to establish more centres with facilities for radiotherapy for those who need them.

## ACKNOWLEDGEMENT

We hereby acknowledge the cooperation of all consultant staff of the department of Obstetrics and Gynaecology for allowing us have access to their patients records .

## REFERENCES

1. **Ijaiya MA, Aboyeji PA, Buhari M O.** Cancer of the cervix in Ilorin Nigeria. *West Afr J Med* . 2004; 23(4) :319-22.

2. **Kyari O, Ngadda H, Mairiga A.** Malignant tumours of the female genital tract in North Eastern Nigeria. *East Afr Med J.* 2004; 81(3): 142-5.
3. **Uzoigwe S A, Seleye-Fubara D.** Cancers of the uterine cervix in PortHarcourt, Rivers state- a 13 year clinico-pathologic review. *Nig J Med.* 2004; 13(2): 110-3.
4. **Gharoro E P, Abedi H O, Okpere E E.** Carcinoma of the cervix aspects of clinical presentation and management in Benin city. *Int J Gynaecol Obstet.* 1999; 67(1): 51-3.
5. **Shwartz P E, Hadjimichael O, Lowel D M, Merimo M J, Janerich D.** Rapidly progressive cervical cancer. The Connecticut experience. *Am J Obstet Gynaecol.* 1996; 175: 1105.
6. **Comber H, Gavin A.** Recent trends in cervical cancer mortality in Britain And Ireland: the case for population based cervical cancer screening. *Br J Cancer.* 2004; 91(11): 1902-4.
7. **Bulk S, Visser O, Rosendaal L, Verheijen R H, Meijer C J.** Incidence and survival rate of women with cervical cancer in the greater Amsterdam area. *Br J Cancer* 2003; 89 (5):834-9.
8. **Onah H E, Ezugwu F O, Eze J M.** Cervical cancer screening. A survey of current practice among Nigerian gynaecologists. *Trop J Obstet Gynaecol.* 2001; 18 (2):78-81.
9. **Adesina O A, Babarinsa I A, Fawole O A, Oladokun A, Adeniji A R, Adewole I F.** Cervical cytology services in Nigeria. Providers perspective. *J Obstet Gynaecol* 2003; 23 (4): 416-18.
10. **Emembolu J O, Ekwempu C C.** Carcinoma of the cervix uteri in Zaria, aetiological factors. *Int J Gynaecol Obstet.* 1988; 26(2): 265-69.
11. **Ndlovu N, Kambarami R.** Factors associated with tumour stage of presentation in invasive cervical cancer. *Cent Afr J Med.* 2003; 49 (9-10): 101-11.
12. **Were O, Buziba N G.** Presentation and health care seeking behaviour of patients with cervical cancer seen at Moi Teaching and Referral Hospital Eldoret Kenya. *East Afr Med J.* 2001; 78 (2): 55-9.
13. **Moodley M, Mould S.** Invasive Cervical cancer and Human Immunodeficiency Virus (HIV) infection in KwazuluNatal South Africa. *J Obstet Gynaecol* 2005. 25 (7): 706-10.
14. **Chirenje Z M.** HIV and cancer of the cervix. *Best Pract Res Clin Obstet Gynaecol.* 2005; 19 (2): 269-76.
15. **Gichangi P, Devuyst H, Estambale B, Rogo K, Bwayo J, Temmerman M.** HIV and cervical cancer in Kenya. *Int J Gynaecol Obstet.* 2002; 76(1): 55-63.
16. **Nwosu S O, Anya S E.** Malignancies of the female genital tract at the University of PortHarcourt Teaching Hospital: a ten year review 1990-1999. *Nig Postgrad Med J.* 2004; 11(2): 107-9.
17. **Adeniji K A.** Analysis of the histopathological pattern of carcinoma of the cervix in Ilorin Nigeria. *Niger J Med* 2001; 10 (4): 165 8.
18. **Anorlu R I, Orakwue C O, Oyeneyin L, Abudu O O.** Late presentation of patients with cervical cancer to a tertiary Hospital in Lagos. What is responsible? *Euro J Gynaecol Oncology* 2004; 25 (6): 729 32.
19. **Kidanto H C, Kilewo C O, Moshiro C.** Cancer of the cervix, knowledge and attitudes of female patients admitted at Muhimbili National Hospital Dar-es salam. *East Afr Med J* 2002; 79 (9): 467 75.
20. **Udigwe G O.** Knowledge , attitude and practice of cervical cancer screening(PAP smear) among female nurses in Nnewi, South Eastern Nigeria. *Niger. J. Clin. Pract.* 2006; 9(1): 40 43.