Cancer of the cervix in Ilorin, Nigeria

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Summary

Objective: The purpose of this study is to review our experience with carcinoma of the cervix in Ilorin, Nigeria.

Method: From 1st January 1990 to 31st December 1999, a total of 169 cases of invasive cervical cancer were seen at the Department of Obstetrics and Gynaecology of the University of Ilorin Teaching Hospital, Ilorin, Nigeria. Results: Carcinoma of the cervix accounted for 63.1% of histologically confirmed gynaecological cancers. Most of the patients were married 147 (98.7%) and of low socio-economic status 132 (88.6%). One hundred and three (89.1%) patients were in the age bracket 40-69years with highest frequency in 40-49 years age group. The disease is associated with high parity with grandmultiparous patients constituting 119 (79.9%) of the cases. Irregular vaginal bleeding 109 (73.2%), vaginal discharge 58 (38.9%) and postcoital bleeding 31(20.5%) were the common symptoms. Nineteen (12.8%) patients reported at the hospital within one month of onset of symptoms. About three quarter of the patients had advanced disease and stage III disease was the most common stage 75 (50.4%).

Conclusion: This study has shown a high incidence of carcinoma of cervix at the University of Ilorin Teaching Hospital.

Keywords: Invasive cervical cancer, Ilorin, Nigeria.

Résumé

Objectif: Cette étude se propose de revoir notre expérience sur le carcinome cervical à Ilorin, Nigeria.

Méthode: Du 1st janvier 1990 au 31 décembre 1999, 169 cas du cancer cervical invasif sont enregistrés au département de Obsétriques et de la Gynaecologie du Complexe Hospitalier de l'Université d'Ilorin, Nigeria.

Résultat: Le carcinome cervical compte pour 63.1% du cancer génicologique confirmé histologiquement. La plupart des 147 patients (98.7%) sont tous mariés et 132 (88.6%) sont d'un statut socio-économique bas. Cent trois patients (89.1%) sont de l'age allant de 40 à 69 ans avec la plus haute fréquence située entre 40 et 49 ans. La maladie est associée a une haute parité avec des patients multipares constituant 119 (79.9%) cas. L'hémorragie vaginale irrégulière avec 109 (73.2%) patients, la décharge vaginale avec 58 (38.9%) cas et l'hémorragie postcoitale avec 31 (20.5%) cas sont les principaux symptomes.

19(12.8%) patients se sont insepits à l'hopit: I durant le premier mois de l'apparition des symptomes. Prés de trois quarts des patients ont une maladie avancée et le degré III de la maladie est le niveau le plus connu 75 (50,4%).

Conclusion: Cette étude montre une haute incience du carcinome cervical au Complexe Hospitalier Universitaire d'Ilorin.

Introduction

Carcinoma of the cervix, a preventable disease has continued to challenge today's gynaecologist. It is a very common gynaecologic malignancy in Nigeria and other parts of Africa¹⁻⁴.

Presently on world-wide basis, cervical cancer comprises approximately 6% of all cancer in women⁵. An estimated half a million new cases are diagnosed yearly with about 234,000 deaths. About 80% of the cases are found in developing countries, which have only 5% of global cancer resources⁶⁻⁸

In developed parts of the world, there has been a steady decline in incidence and mortality of the disease as a result of cervical screening programme⁹. It has been possible to do this because cervical cancer is a slowly evolving disease that begins as a mild dysplsia and progresses over as many as 10 or more years to invasive carcinoma¹⁰

The aim of this study is to review the experience with carcinoma of the cervix at the University of Ilorin Teaching Hospital, Ilorin, Nigeria.

Materials and methods

This study was conducted at the Department of Obstetrics and Gynaecology of the University of Ilorin Teaching Hospital, Ilorin. All patients with histological confirmed cervical carcinoma at the hospital from 1st January, 1990 to 31st December 1999 were retrospectively sudied.

There were 236 confirmed gynaecological cancers, of which 149 cases were invasive cervical cancer. Information was obtained from patients' case notes and cancer registry record. Data such as age, parity, ¿ducational level, and occupation of patient's husband, clinical symptoms, stage and histological type were extracted and analysed.

Both patients' educational status and their husbands' occupation were used for social class stratification¹⁴. All gynaecological cancers reviewed were confirmed by

histological examination or by urinary hCG level as in Chorio-carcinoma.

The following investigations were mandatory: full blood count, electrolytes and urea, liver function tests, intravenous urogram and chest X-ray. Endometrial curettage was done when necessary.

Senior Registrars or Consultant gynaecologist performed clinical staging (FIGO staging) of the disease under anaesthesia. Stages 11b and above are considered to be advanced disease.

Histological technique – Specimens were fixed in 10% formalin as soon as obtained. There after Paraffin embed-

Table 1 Age distribution

Age	No. of cases	%
<20	Nil	Nil
20 - 29	2	1.3
30 - 39	18	12.1
40 - 49	41	27.5
50 - 59	27	18.1
60 - 69	35	23.5
70 - 79	17	11.4
≥80	9	6.0
Total	149	100

Table 2 Parity distribution

Age	No. of cases	%
0	1	0.7
1	3	2.0
2	4	2.7
3	11	7.4
4	11	7.4
□ 5	119	79.9
Total	149	100

ding and Haemotoxylin and Eosin staining techniques were employed routinely. However, some special stains were sometimes used for better contrast in different components of tissue or in localising the various chemical substances in cells or tissue e.g. Alcian blue, PAS and Masson's trichrome. Senior registrar or Consultant Pathologist examined the slides.

Results

Of the 236 confirmed gyneacological malignancies recorded 149 (63.1%) were invasive cervical cancer, making it the most common gynaecological cancer. Two(1.3%) cases were secondary cervical cancer from endometrial cancer.

One hundred and thirty two patients (88.6%) were of low socio-economic status and 147 (98.7%) were married.

The age range of the patients was 25-85 years with mean age of 54.7 years. Most of the patients 103 (89.1%) were in the age bracket 40-69 years. The peak incidence was in 40-49 years. This is depicted in Table 1.

Table 3 Symptoms

Variable	No. of cases	%
Irregular vaginal bleeding	109	73.2
Vaginal discharge	58	38.9
Post coital bleeding	31	20.8
Loss of weight	29	19.5
Abdominal pain	21	14.1
Urinary frequency	17	11.4
Passage of urine per vaginam	8	5.4
Backache	7	4.7
Haematochezia	4	2.7
Passage of faeces per vaginam	2	1.3
Many patients had multitude of symptoms		
Duration of symptoms (Months)		
<1	19	12.8
2 - 3	45	30.2
4 – 5	24	16.1
6 – 7	22	14.8
≥8	39	26.2
Total	149	100

Table 4 Clinical stage

Stage	No of cases	%
16	17	11.4
11a	20	13.4
116	18	12.1
111a	19	12.8
111b	56	37.6
l V a	16	10.7
IVb	3	2.0
Total	149	100

Table 5 Histological pattern

Type	No of cases	%
Squamous cell carcinoma	127	85.2
Adenocarcinoma	8	5.4
Adenosquamous carcinoma	14	9.4
Total	149	100
Differentiation		
Well differentiated	53	35.6
Moderately differentiated	50	33.6
Poorly differentiated	46	30.9
Total	149	100

The frequency of the disease rises as parity increases with the highest frequency in grandmultiparous (para 5

and above) women 119 (79.9%). While patients with low parity (para 2 and below) were few 8(5.4%) – Table 2.

Majority of the patients with cervical cancer had multitude of symptoms. Irregular vaginal bleeding 109 (73.2%). Vaginal discharge 58 (38.9%) and Postcoital bleeding 31 (20.8%) were the main symptoms experienced. The other symptoms include loss of weight 29 (19.5%), abdominal pain 21 (14.1%) and urinary frequency 17(11.4%). The duration of symptom as at the time of seeking medical attention ranged between 3 days and 10 years. Only 19 (12.8%) reported within one month of onset of symptoms – Table 3.

One hundred and twelve (75.2%) patients presented with advanced stage of the disease while the remaining 37(24.8%) had early cervical cancer. Stage III was the most common stage 75(50.4%) This is depicted in Table 4.

Table 5 reveals the histological types of carcinoma of the cervix. Majority of the cases 127 (85.2%) were Squamous cell variety while Adenosquamous carcinoma and Adenocarcinoma accounted for 14 (9.4%) and 8(5.4%) respectively. Fifty-three (35.6%) were well differentiated. Closely followed by moderately differentiated 50 (33.6%) and poorly differentiated cervical cancer 46 (30.9%).

Discussion

The incidence of 63.1% of carcinoma of the cervix of all histologically confirmed gynecological malignancies in this study, clearly demonstrates the pre-eminence of cervical cancer in our environment. The finding in this study is similar to the 62.7% and 72.6% obtained at Ibadan⁵ and Maiduguri¹⁶ both in Nigeria respectively.

The frequency with which invasive cancer of the cervix occurs is not known exactly but the best incidence data indicate a rate approximately 8 – 10/100,000 per year¹¹. Incidence appears to change from one locality to another, however, from various studies¹⁻⁴, there is no doubt that it is the most common gynaecological cancer in many developing countries. Screening procedure is almost non-existing in many developing countries, a procedure that has led to substantial reduction in incidence, morbidity and mortality of cervical cancer in developed countries.

The age range distribution of our patients is not different from results obtained in other studies^{15, 18, 19}. The peak age of incidence is in the fifth decade which is similar to the findings of Pindiga et al¹⁶ and FIGO report of 1986¹¹.

Multiparity has been associated with cervical cancer. It is therefore not surprising that the risk of developing cervical cancer was highest among the grandmultiparous women. This finding is similar to the experience of many workers on the subject 12.16.18.21.

In all probability, the first symptom of early cervical cancer is a thin, watery blood-tinged vaginal discharge that frequently goes unrecognised by the patient¹¹. In this study, irregular vaginal bleeding was the earliest presenting symptom. While in Zaria's study, Nigeria³, the earliest presenting symptom was post-coital bleeding. The classical symptom is intermittent painless metrorrhagia¹¹.

Late presentation is a feature of carcinoma of the cervix in developing countries^{3,6,12} and the late symptoms include pain often referred to the flank or leg, massive haemorrhage and development of uraemia. In this study, 75% of the patients had advanced disease due to late presentation. Stage III was the most common presentation, which is similar to the experience from Kumasi, Ghana¹². In most large series, 85% to 90% of carcinoma of the cervix is squamous cell variety¹¹. In this study, 85.2% were squamous cell carcinoma. This is comparable to the 88.0% and 92% from Iran¹⁷ and Maiduguri in Nigeria¹⁶ respectively. Adeno-squamous carcinoma an aggressive variety constituted 9.4% in this review. This is higher than the 0-2.1% of published report^{16,17,20}. The reason for high figure is yet unknown.

Management options available for the treatment of carcinoma of the cervix include surgery, radiotherapy, chemotherapy and combinations of these modalities. For those with cervical cancer stage IIa and less, curative intent with surgery or radiotherapy is usually contemplated. However, with those with advanced disease, radiotherapy is the optimal method of management.

In conclusion, this study has shown a high incidence of invasive cervical cancer. This is not different from what is obtained in other developing countries. In the meantime opportunistic screening during antenatal care, family planning clinic and gynaecological clinic attendance should be introduced.

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