

## Clinico-pathological presentation of primary cervical cancer seen in Ilorin, Nigeria

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### ABSTRACT

**Background:** Invasive cervical cancer remains the most common cancer in the developing countries and the second leading cause of cancer mortality in women worldwide.

**Methods:** A 10-year retrospective review of histologically confirmed primary cervical cancers seen at the department of obstetrics and gynaecology of the university of Ilorin teaching hospital, Ilorin in 10 years.

**Results:** Of the 236 confirmed gynaecological cancers, 147 (62.3%) cases were histologically confirmed primary cervical cancers. One hundred and thirty two patients (89.8%) were of low socio-economic status and 145 (98.6%) were married. Majority of the patients 102 (69.4%) were in the age range 40 – 69 years, with highest frequency in 40 – 49 years. The study also revealed a steady rise in the incidence of the disease with increase in parity. Grandmultiparous women had the highest incidence 119 (80.9%). Most of the patients had multiple symptoms. The common symptoms include irregular vaginal bleeding 108 (73.5%), vaginal discharge 58 (39.5%) and post coital bleeding 31 (21.1%). Only 18 (12.3%) reported at the hospital within one month of onset of symptoms. About three-quarters of the patients had advanced disease (stage IIb to IVb) and Stage III was the most common 74 (50.3%). Squamous cell carcinoma accounted for 126 (85.7%) of the cases while Adenosquamous carcinoma and Adenocarcinoma were responsible for 13 (8.9%) and 8 (5.4%) cases respectively.

**Conclusion:** This study has shown a high incidence of primary cervical cancer in our centre. The common presenting symptoms were irregular vaginal bleeding, vaginal discharge and postcoital bleeding in that order. Majority of the patients presented in advanced stage (stage IIb – IVb) of the disease.

**Key words:** Cervical cancer, Clinico-pathological presentation

### Introduction

Carcinoma of the cervix is a preventable disease with a fascinating epidemiology. A review of literature shows that the incidence varies widely among populations. This is a reflection of the

influence of environmental factors, cervical cytological screening tests and treatment of pre-invasive lesions.<sup>1-3</sup>

Worldwide, cervical cancer comprises approximately 12% of all cancers in women.<sup>4,5</sup> It is the second most common cancer in women

worldwide but the commonest in developing countries with Nigeria inclusive.<sup>4-6,7</sup> Globally, an estimated half a million new cases are diagnosed yearly with 234,000 deaths with 80% of the cases being found in developing countries which has only 5% of global cancer resources.<sup>5,8,9</sup> Carcinoma of the cervix accounted for 4.18% of new gynaecological attendance in Zaria, Nigeria.<sup>10</sup> In developed countries, there has been a reduction in the invasive cervical cancer due in large part to widespread cervical cytological screening programme.<sup>3,8</sup>

Surgery and Radiotherapy are the main treatment modalities. The choice depends largely on the clinical stage of the disease but sometimes patient's age is taken into consideration. However, there is paucity of Radiotherapy facilities and Manpower in many third world countries.<sup>11,12</sup>

An effective cytological screening policy and treatment of pre-invasive lesions are required to reduce the menace and mortality from the disease. In the light of the importance of this condition, we therefore present a report of the clinico-pathological presentation of primary cervical cancer in Ilorin and offer some recommendations that could reduce the incidence of the disease.

## Materials and Methods

This study was conducted in the Department of Obstetrics and Gynaecology of University of Ilorin Teaching Hospital, Ilorin. All patients with histologically confirmed cervical carcinoma at the hospital from 1<sup>st</sup> January 1990 to 31<sup>st</sup> December 1999 were retrospectively studied.

There were 236 confirmed Gynaecological cancers, of which 147 cases were primary cervical cancer. Information was obtained from the patients' case notes and the cancer registry record. Data such as: age, parity, educational level, and occupation of patient's husband, clinical symptoms, stage, and histological type were extracted and analysed.

All gynaecological cancers reviewed were confirmed by histological examination or in the case of Choriocarcinoma by urinary HCG. Clinical staging (FIGO staging) of all the cases

was performed under anaesthesia by Senior Registrar or Consultant Gynaecologist. Olusanya et al's<sup>13</sup> social classification using both the patients' educational status and their husband's occupation was adopted for this study.

## Results

Of the 236 confirmed gynaecological malignancies recorded 147 (62.3%) were primary cervical cancer, making it the most common gynaecological cancer. One hundred and thirty two patients (89.8%) were of low socio-economic status and 145 (98.6%) were married. The age range of the patients was 25 – 85 years with mean age of 54.9 years. Most of the patients 102 (69.4%) were in the age bracket 40 – 69 years. The peak incidence was in 40 – 49 years age group. This is summarised in Table 1.

The frequency of the disease rises as parity increases with the highest frequency in grandmultiparous (para 5 and above) women 119 (80.9%). While patients with low parity (para 2 and below) were few 7 (4.8%) (Table 2).

Table 3(a) shows the presenting symptoms among patients with primary cervical cancer. Majority of the patients with cervical cancer had multiple of symptoms. Irregular vaginal bleeding 108 (73.5%), vaginal discharge 58 (39.5%) and postcoital bleeding 31 (21.1%) were the main symptoms experienced. The other symptoms include loss of weight 29 (19.7%), abdominal pain 20 (13.6%) and urinary frequency 17 (11.6%). The duration of symptom as at the time of seeking medical attention ranged between 3 days and 10 years. Only 18 (12.3%) patients reported within one month of onset of symptoms (Table 3b).

One hundred and eleven (75.5%) patients presented with advanced stage of the disease (stage IIb – IVb) while the remaining 36 (24.5%) had early cervical cancer (stage Ia – IIa). Stage III was the most common stage of presentation, 74 (50.3%). (Table 4) Majority of the cases, 126 (85.7%) were squamous cell variety while Adenosquamous carcinoma and Adenocarcinoma accounted for 13 (8.9%) and 8 (5.4%) respectively. (Table 5).

*Table 1: Age distribution of primary cervical cancer in Ilorin, Nigeria*

Age (years)	No.	%
< 20	-	0
20 – 29	2	1.3
30 – 39	17	11.6
40 – 49	40	27.2
50 – 59	27	18.4
60 – 69	35	23.8
70 – 79	17	11.6
• 80	9	6.1
Total	147	100

*Table 2: Parity distribution of primary cervical cancer in Ilorin, Nigeria*

Parity	No.	%
0	1	0.7
1	2	1.4
2	4	2.7
3	10	6.8
4	11	7.5
• 5	119	80.9
Total	147	100

*Table 3(a): Presenting symptoms in patients with primary cervical cancer in Ilorin, Nigeria*

Symptom	No.	%
Irregular Vaginal Bleeding	108	73.5
Vaginal Discharge	58	39.5
Post Coital Bleeding	31	21.1
Loss of weight	29	19.7
Abdominal Pain	20	13.6
Urinary Frequency	17	11.6
Passage of urine per vaginam	8	5.4
Back ache	7	4.8
Haematochezia	4	2.7
Passage of faeces per vaginam	2	1.4

Some patients had multiple symptoms

*Table 3(b): Duration of symptoms in patients with primary cervical cancer in Ilorin, Nigeria*

Duration (Months)	No.
< 1	18
2 – 3	44
4 – 5	24
6 – 7	22
• 8	39
Total	147

*Table 4: Clinical stage of primary cervical cancer in Ilorin, Nigeria*

Stage	No.	%
Ib	17	11.6
IIa	19	12.9
IIb	18	12.2
IIIa	19	12.9
IIIb	55	37.4
IVa	16	10.9
IVb	3	2.0
Total	147	100

*Table 5: Histological type of primary cervical cancer in Ilorin, Nigeria*

Type	No.	%
Squamous Cell Carcinoma	126	85.7
Adenocarcinoma	8	5.4
Adenosquamous carcinoma	13	8.9
Total	147	100

## Discussion

Primary carcinoma of the cervix accounted for 62.3% of all the histologically confirmed gynaecological malignancies in this study. This confirms the pre-eminence of cervical cancer in our environment. It is however unfortunate in the sense that carcinoma of the cervix is largely preventable. This finding is similar to figures of 62.7% and 72.6% recorded in Ibadan<sup>14</sup> and Maiduguri<sup>15</sup> respectively. Hence it is the most common gynaecological cancer in our centre as

well as in many third world countries.<sup>7,11,15,16</sup> The reasons for this high incidence is not far fetched, as most of the patients were of low socio-economic status and illiterates who did not avail themselves of the opportunity of screening due to poverty and ignorance. While the incidence is declining in Western countries, where there is effective screening policy.<sup>3,8</sup>

The age distribution of our patients is comparable with findings from other centres.<sup>11,14,16</sup> The peak age of incidence was in the fifth decade in this study 27.2% cases, which is similar to 31.5% and 41.5% reported by Pindiga *et al*<sup>15</sup> and Rafindadi *et al*<sup>17</sup> respectively.

This review showed an association between high number of deliveries and incidence of cervical cancer. The risk of developing cervical cancer was highest among grandmultiparous women, 80.9% of cases. This is in concordance with reports from other centres,<sup>16,18,19</sup> grandmultipara account for 78.1% in Kumasi, Ghana<sup>11</sup> and 82.9% in Zaria, Nigeria.<sup>17</sup>

Many of our patients had multiple symptoms. Irregular vaginal bleeding was the most common symptom followed by vaginal discharge and post coital bleeding. These are the classical symptoms of carcinoma of the cervix.<sup>3,9,11,18</sup>

The stage distribution of this disease in our centre conforms with the distribution in other developing countries as three quarters of the patients had advanced disease due to late presentation to the hospital.<sup>3,11,16</sup> Hence, the prognosis is poor. Stage III carcinoma of the cervix was the most common stage seen at Ilorin, which conforms to Kumasi's experience.<sup>11</sup> The bulk of our patients with advanced disease are usually referred to Ibadan for radiotherapy due to lack of facility.

Most of the cases encountered were squamous cell carcinoma (85.7%). This is comparable to figure of 88.0%, 92% and 93.9% from Iran,<sup>16</sup> Maiduguri<sup>15</sup> and Ibadan<sup>7</sup> respectively. However, there is a higher incidence of the aggressive variety, adenocarcinoma (8.9%) in this centre. This is more than 0 – 2.1% in published reports.<sup>15,16,19</sup> The reason for this high figure could be attributed to

sampling, as this is hospital-based study and possibly the criteria of diagnosis.

This study has demonstrated a high incidence of invasive cervical cancer, similar to what is seen in other developing countries.<sup>7,11,14-17</sup> Irregular vaginal bleeding, vaginal discharge and postcoital bleeding were the common presenting complaints and clinical stage III disease was the most common clinical stage of presentation. We recommend the establishment of general screening programme, health education and the establishment of a radiotherapy centre in Ilorin to increase patients' accessibility.

### Acknowledgements

We wish to acknowledge all the consultants in the departments of Obstetrics & Gynaecology, and Histopathology of the University Teaching Hospital, Ilorin for allowing us to use their patients' records.

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