SHORT COMMUNICATION

A TWENTY YEAR HISTO-PATHOLOGICAL REVIEW OF 43 CASES OF UTERINE CORPUS CANCERS IN MAIDUGURI, NORTH –EASTERN NIGERIA

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ABSTRACT

Background: Uterine corpus cancer is primarily a disease of postmenopausal women. It is worthwhile to look at the histopathologic types of uterine corpus cancers in an environment where these types of cancers are relatively uncommon.

Objective: To determine the histo-pathological types of uterine corpus cancers seen in Maiduguri, North –eastern Nigeria.

Methods: This was a twenty year retrospective review of histo-pathological types of uterine corpus cancers seen from January 1989 to December 2008.

Results: Of the 43 cases of uterine corpus cancers, 29(67.4%) were endometriod carcinomas, 7(16.3%) were special variant carcinomas, 4(9.3%) were sarcomas, 2 (4.7%) were metastasis from the cervix and 1(2.3%) was a mixed Mullerian tumour. The mean age was 51.1+ 10.6. The peak age specific incidence was 45-54years.

Conclusion: The peak age specific incidence of uterine corpus cancer in Maiduguri is lower compared to that in western countries. Leiomyosarcoma (LMS) was found to be higher in Maiduguri than reports from the western world.

Keywords: Uterine corpus cancer; Histopathology; Maiduguri.

INTRODUCTION

About 95% of uterine cancers are from the endometrium. [1] Unlike in developing countries were cervical cancer is the leading genital cancer; endometrial cancer is the commonest in the United States. It is commoner in whites than in blacks and is not related to sexual activity. The peak incidence of onset is in the seventh decade. However about 25% present in premenopausal women and the disease have been reported in women in their third decade. Evidence is accumulating that there is a genetic factor in the development of endometrial cancer. [2] Endometrial carcinoma is the 'friendliest' of all genital cancers because its early presentation leads to early intervention with better outcome.

Most endometrial carcinomas arise on the background of atypical endometrial hyperplasia.[3] There are two major types of endometrial cancer. Type I is associated with either endogenous or exogenous unopposed estrogen exposure, and usually consist of a low-grade or well-differentiated tumor with a favorable prognosis. Type II tumors grow independent of estrogen and are associated with endometrial atrophy, with preponderance in Asian and African American women. The histology of this type is either poorly differentiated endometriod or nonendometriod and confers a high risk of relapse with poor prognosis. [2, 4, 5, 6, 7]

The observation in the 70s in the United States that the incidence of endometrial cancer increased with the increasing use of exogenous oestrogens in postmenopausal women implicated estrogens as a causative factor in endometrial carcinoma. [8, 9] In Furtherance of this theory, patients with anovulatory cycles have been shown to be at increased risk of developing endometrial cancer because of prolonged periods of estrogenic stimulation of the endometrium without the opposing effects of progesterone. [2]

Since about 75% of women with endometrial cancer are postmenopausal, the most common symptom is postmenopausal bleeding. [10] The 25% of women with endometrial cancers, who are pre or perimenopausal, may present with irregular vaginal bleeding which could delay diagnosis with disastrous consequences.

Leiomyosarcoma (LMS) are rare tumours of the uterus. [11] The diagnostic criteria for Leiomyosarcoma are still controversial. [12] Most endometrial stromal sarcomas (ESSs) have characteristic histological appearance, but there are several variants.[13]

Being a rare tumour in our environment, little attention is given to both the clinical and histopathological aspects of uterine cancers. This study aims to review the histopathologic types of uterine corpus carcinomas in Maiduguri and compare our findings with other reports.

MATERIALS AND METHODS

The University of Maiduguri Teaching Hospital is the only Teaching Hospital in the North Eastern region. It serves not

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only the people of Borno state but neighboring states and even Chad and Niger republics.

A twenty year retrospective review of all endometrial biopsies and hysterectomy specimens received at the histopathology department of the University of Maiduguri Teaching Hospital (UMTH) from January 1989 to December 2008 was carried out. The information pertaining to the patients were retrieved from the bench book and request forms. Cases in which the age was not specified and those whose request forms or slides were not found were excluded from the study. The endometrial biopsies/uterine specimens were previously fixed in formalin, processed and stained with Haematoxylin and Eosin. The slides were then reviewed and the tumours classified according to histological types. The results were presented as numbers and percentages.

RESULTS

Table 1 shows the age distribution of women with uterine corpus cancers. The mean age was 51.1± 10.6 with a range of 22 to 75years.The median age was 50years. The peak age specific incidence was 45-54 years which made up 19(44.2%) of cases. Two (4.7%) were under 25years of age while 6(14%) were above 65years.

Table 1: Age distribution of women with uterine corpus cancer

Age	Number	Percentage
15-24	**2**	**4.7**
25-34	**0**	
35-44	**4**	**9.3**
45-54	**19**	**44.2**
55-64	**12**	**27.9**
>65	**6**	**14.0**
TOTAL	**43**	**100**

Table 2: Histopathological types of uterine corpus cancer

Type	Number	Percentage
Endometriod (usual) carcinomas		
Secretory type	25	58.1
Ciliated type	3	7.0
Adenosquamous type	1	2.3
Special variant carcinomas		
Pure squamous cell carcinoma	4	9.3
Papillary serous type	1	2.3
Clear cell	1	2.3
Undifferentiated type	1	2.3
Metastasis from cervix	**2**	**4.7**
Uterine sarcoma		
Endometrial stromal sarcoma	1	2.3
Leiomyosarcoma	3	7.0
Mixed Mullerian tumour		
Carcinosarcoma	1	2.3
TOTAL 43	**100**	

Endometriod adenocarcinoma was the commonest histopathological type seen in 29(67.4%) while special variant carcinomas made up 7(16.3%). Uterine sarcomas and mixed Mullerian tumours were seen in 4(9.3%) and 1(2.3%0) respectively. Two (4.7%) were metastasis from squamous cell carcinoma of the cervix. The histopathological subtypes of uterine corpus cancers revealed secretory type as the commonest which made up 25(58.1%) of all uterine cancers. Leiomyosarcoma constituted 3(7.0%) of all uterine carcinomas and 75% of all uterine sarcomas as shown on Table 2.

DISCUSSION

In general, the incidence of endometrial adenocarcinoma, which is the commonest of the uterine corpus cancers, is much lower in South America, Asia, the Orient, and Africa than in North America and Europe, a reversal of incidence data for cervical cancer in the same areas. [14]

About 83.7% of uterine cancers in our study were from the endometrium. This is lower than the 95% reported by William & Jim.[1] Most of the endometrial cancers in our study was the endometriod type which made up 80.6% of endometrial carcinoma. This is higher than the 60% reported [1] but closely agrees with 75% to 85% reported from other series. [15,16,17,18,19,20] Adenosquamous carcinoma was found in 2.8% of endometrial cancers. This is lower than 5-6% and 10-20% reported from other studies.[1,2] Clear cell carcinoma made up 2.8% of all endometrial carcinomas. This fairly agrees with the 3-6% reported. [1]

Uterine sarcomas tend to occur more in black women and LMS occur more often in those aged 30-50years. [1] LMSs are reported to make up 35-40% of all uterine sarcomas and 1-2% of all uterine cancers. [2] This report is in sharp contrast with our finding where uterine sarcomas made up 9.3% of all uterine cancers and 75% of all uterine sarcomas. In the same vein ESSs made up 25% of all sarcomas in our series which is in sharp contrast to the 8% of all sarcomas from other report. [2] Malignant mixed mesodermal tumours (MMMTs) which are reported to account for 3-6% of all uterine tumours represented 2.3% of uterine cancers in this study.

The peak age specific incidence in this study was 45-54 years which accounted for 44.2% of cases. This is in sharp contrast to studies from the western world were the peak incidence is in the seventh decade of life. [1, 2] As a matter of fact 53.5% of cases were in the perimenopausal period while only 14% were in women greater than 65years. Endometriod carcinoma was seen in 4.7% of women under 25years.Similar finding has been reported. [2] Endometrial adenocarcinoma in women under 40 years represents between 2% and 14% of all endometrial adenocarcinomas. [21] Women diagnosed with endometrial cancer under 40years make up only 5% of total cases. These women often have specific risk factors such as morbid obesity, chronic

anovulation and hereditary syndromes. [1]

Unlike in the western world, postmenopausal bleeding may not be a prominent feature because the majority of our women present in the perimenopausal period. There is therefore the need for high index of suspicion in picking early a cancer which has a good prognosis. We recommend liberal use of ultrasound and office endometrial biopsy for perimenopausal women with abnormal vaginal bleeding in

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