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VULVA CARCINOMA AT THE UNIVERSITY OF BENIN TEACHING HOSPITAL (UBTH); A TEN YEAR REVIEW

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ABSTRACT

Vulvar carcinoma is not a common gynaecological cancer seen in UBTH. It has never been reviewed in detail. This is a 10 year retrospective review of vulva carcinoma in UBTH to study the incidence, socio-demographic characteristics and management modalities used in vulva carcinoma in UBTH. Case notes, ward registers and histopathology logbooks were used in collecting data.12808 gynaecological cases were admitted in UBTH in the ten years reviewed. 494 were patients with gynaecological malignancies. Of these 28 (5.7%) had confirmed histological diagnosis of vulva cancer which was the 4th most common gynaecological cancer after cervical (62.5%), ovarian (17.0%) and endometrial cancers (6.8%). Vulva cancer was more common in the 6th and 7th decades (51-60 years, 36%, 61-70 years, 28.6%). 78.9% of vulva cancers were first diagnosed after the age of 50, a percentage higher than for any other genital malignancy. The highest educational attainment of patients' diagnosed with vulva cancer were primary 64.3%, secondary/diploma 28.6% and university education in 7.1%. Surgical treatment modalities employed were hemivulvectomy, excision biopsy and wide local excision. 35.7% were in-operable and only a biopsy for histological diagnosis could be collected. 57.1% of the patients had chemotherapy while 3 patients (10.7%) had radiotherapy.Vulvar cancer patients tend to present late for diagnosis and management in UBTH. Poor educational and socioeconomic background likely influenced late presentation of patients. Good public enlightenment about cancers in general and Vulvar cancer in particular could influence early presentation positively.

INTRODUCTION

Cancer of the vulva is a relatively rare neoplasm accounting for approximately 4% of all gynaecological malignancies and less than 1% of all cancers in women.[1,2,3,4,5] At UBTH, incidence is quoted as 3% and it ranks 5th in incidence of gynaecological cancers after cervical, ovarian, malignant trophoblastic disease and endometrial cancers[6]. Typically vulva cancers occur in the seventh decade.[2,7] The common histological types of vulvar cancer are squamous cell carcinoma, malignant melanoma, bartholin's gland carcinoma, basal cell carcinoma, soft tissue sarcoma and malignant schwannoma.[5,8]

Vulvar intraepithelial neoplasia (VIN) is a pre-invasive squamous lesion of the vulva that could progress to carcinoma. The median age of patients diagnosed with vulvar carcinoma in situ is approximately 45 to 50 years, whereas the median age for invasive vulvar carcinoma is about 65 to

KEYWORDS:

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70 years.[9,10,11] Strong associations between HPV infection and the later development of vulvar carcinoma have been identified.[4,5,12,13]

Risk factors for vulvar carcinoma include smoking, young age at first sexual intercourse, history of multiple sexual partners, history of sexually transmitted disease, abnormal Papanicolaou smear, presence of genital warts, immunosuppression and history of vulvar inflammation or lichen sclerosis.[4,8,13,14,15,16] HPV infection, immunosuppression, and advanced age are the strongest risk factors identified for vulvar neoplasms.[4,15]

The most prominent presenting symptom of vulvar cancer is localized pruritus. Other common symptoms are a vulvar mass with endophytic or exophytic lesions ranging from a small vulvar swelling to massive vulvar masses with ulcerations, bleeding, local pain, surface drainage from the tumour, vaginal discharge or urinary tract symptoms.[7,14,17,18,19,20] Vulvar complaints are often noted many years before malignant changes are documented and often investigated only after trials of various medical treatment have been unsuccessful. In more than 50% of patients there is a (patients' and doctors') delay of more than a year before the diagnosis is established.[7,8]

Contemporary management of vulva carcinoma is with wide local excision or hemivulvectomy for early stage disease, use of plastic reconstructive techniques for large surgical defects and incorporation of radiation and chemotherapy into treatment of loco-regionally advanced disease. By individualizing treatment approach, physical and psychological morbidity can be significantly decreased without compromising overall survival.[2,21]

Patients with FIGO Stages 1 and 2 disease could be managed by simple wide local excision with uni/bilateral groin dissection if no more than one lymph node is positive otherwise there should be additional radiotherapy[21]. For FIGO Stages 3 and 4 disease above surgery may include partial vaginectomy and or urethrectomy. If adequate margins are not achieved or nodes are positive, partial or total pelvic exenteration with radiotherapy could be additional treatment modality.[7,10]

Studies on incidence, prevalence and management of vulvar carcinoma are relatively few in West Africa. In UBTH there has been no published work on the incidence, sociodermographic variables and management of vulva carcinoma till date. This study is therefore undertaken to assess the management of vulva carcinoma in UBTH noting the sociodermographic characteristic of the patients managed for vulvar cancer.

MATERIALS AND METHODS

The study is a retrospective descriptive review of histologically confirmed vulva carcinoma from January 1st 1997 to December 31st 2006 in UBTH. There is a Gynae-Oncology Unit to whom most genital cancers including Vulva cancers are referred for specialist oncological management.

In UBTH patients assessed to have FIGO Stages 1 and 2 disease are managed by simple wide local excision with groin dissection and additional radiotherapy if lymph nodes are positive. For FIGO Stages 3 and 4, partial vaginectomy and or urethrectomy may be added to wide local

excision in addition to radiotherapy. Partial or total pelvic exenteration are occasionally indicated in advanced disease if patent is fit for surgery. Samples are sent for histological confirmation. Inoperable cases are managed with radiotherapy. Cases for radiotherapy used to be referred but UBTH in the last few years has acquired External Beam Radiotherapy facilities so cases that require radiotherapy are now managed in UBTH.

Data was extracted from case notes of patients diagnosed histologically with genital tract malignancies including vulva carcinoma, Ward registers of the gynaecological ward, Histology Logbook of the Department of Pathology and theatre registers in UBTH. Data were entered into and analysed using the Statistical Package for the Social Sciences (SPSS) 13 (SPSS Inc., Chicago, IL, USA).

Chi square and students T test were used to test the levels of significance and two by two tables and bar chart were used in interpretation of the results.

RESULTS

In the ten years, 12808 patients were admitted into the gynaecological ward. 494 (3.86%) were admitted for histologically confirmed genital tract malignancies. 28 of these (5.7%) had vulvar cancer.

Vulvar cancer was the 4th most common during this ten year period after cervical cancer (62.5%), ovarian cancer (17.0%), and endometrial cancer (6.8%). See figure 1.

The educational status of the patients diagnosed with vulvar cancer is represented in Table1. 64.3% of the patients had only primary or no education while only 7.1% had university education.

Figure 2 depicts a line graph of the trend of genital tract malignancies in UBTH. Apart from cervical and ovarian cancers, there was no significant change in the incidence of the various malignancies from year to year.

Figure 3 shows the age group incidence of the various genital tract malignancies. The peak incidence of vulvar cancer was in the 51-60 age group with 36% while the 61-70 age group was 28.6%. 78.9% of all vulvar cancer cases were diagnosed after the age of 50. The incidence of cancer after age 50 was markedly higher for vulvar cancer than all other genital tract malignancies.

Table 2 shows the FIGO staging of vulvar cancer diagnosed in UBTH. Over 57% of the cases were diagnosed at stage 3 and above, stage 1B was 7.14%. There was no stage 1A amongst the patients.

Table 3 shows the treatment modalities given to vulvar cancer patients in the ten years under review. 64.3% of the patients had surgery while 35.7% were inoperable and only had histological sample collected for diagnosis. 57.1% had chemotherapy and 10.7% had radiotherapy following referral.

DISCUSSION

Vulvar cancer is a disease of peri-menopausal and post-menopausal women[5]. The Aetiology of vulva cancer is still being studied but closely associated factors include human papilloma virus (HPV) infection, granulomatous infections such as herpes simplex, smoking, young age at first sexual intercourse, history of multiple sexual partners, history of sexually transmitted disease and history of vulva inflammation or lichen sclerosis[3,4,5]

FIGURE 1: INCIDENCE OF HISTOLOGICALLY CONFIRMED GENITAL TRACT MALIGNANCIES IN UBTH, 1997-2006.

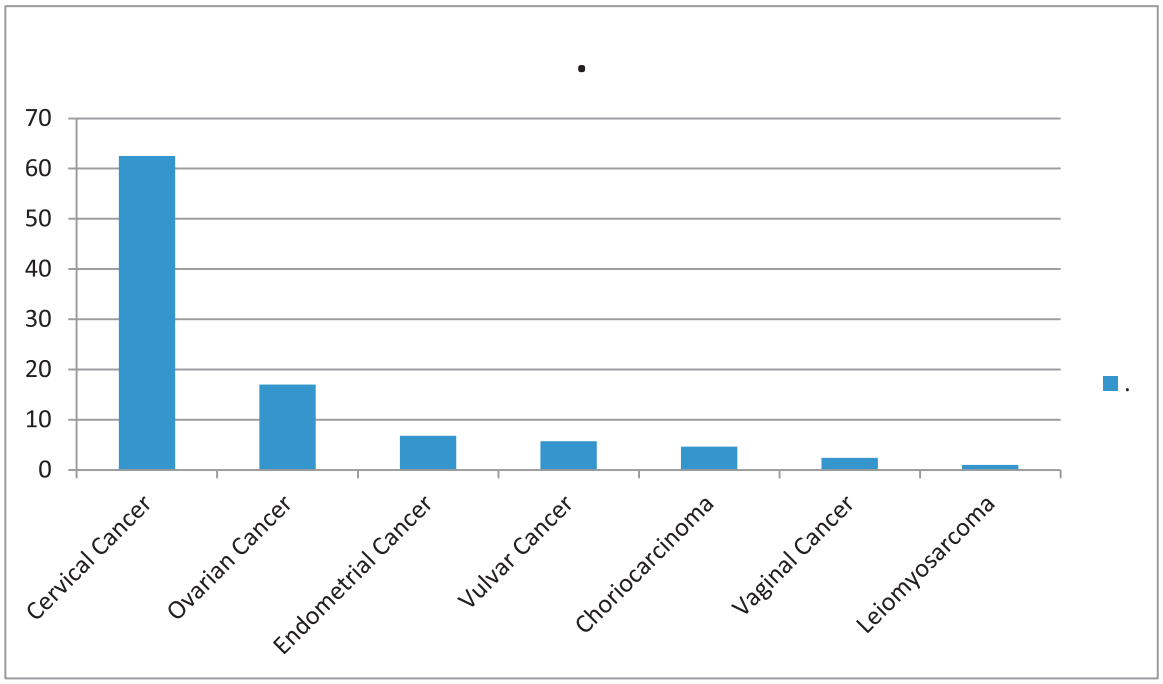

FIGURE 2: TREND OF GENITAL TRACT MALIGNANCY 1997-2006.

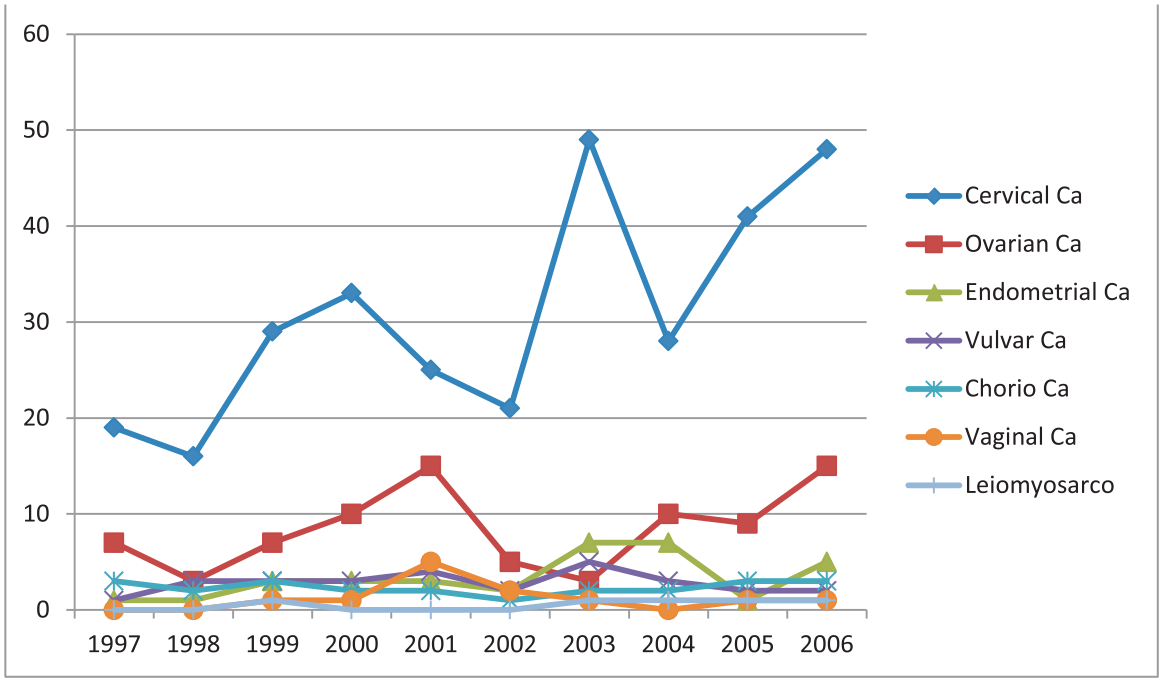

FIGURE 3: PERCENTAGE INCIDENCE VERSUS AGE GROUP OF GENITAL TRACT MALIGNANCIES

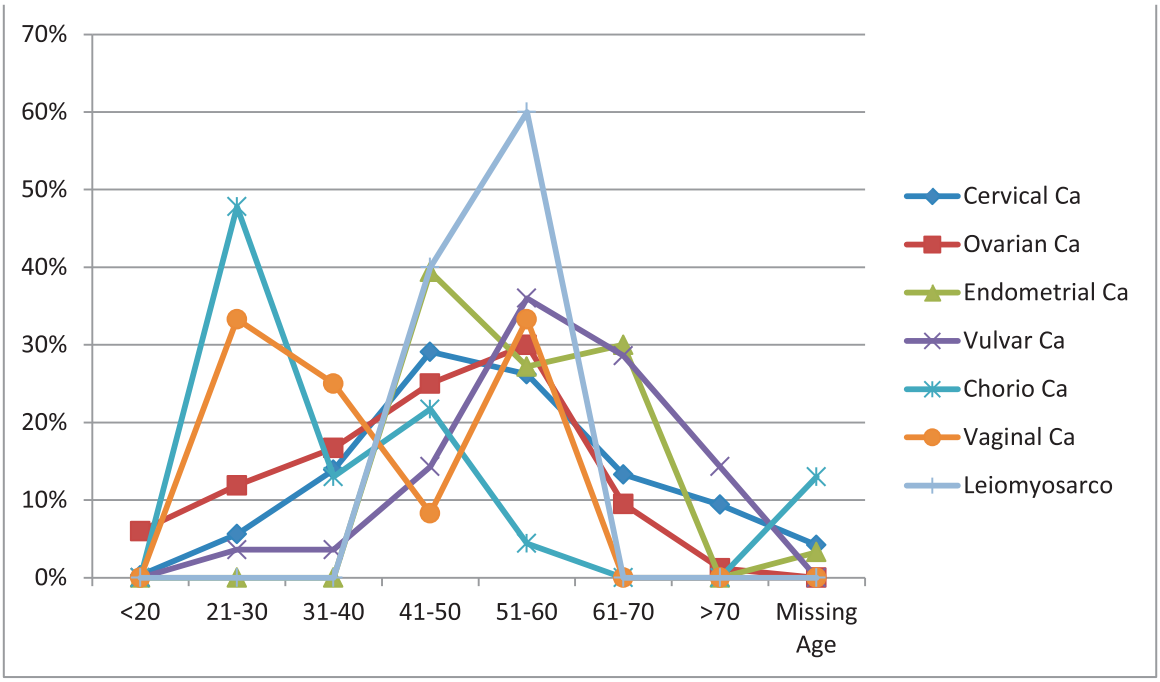

FIGURE 1: HIGHEST EDUCATIONAL ATTAINMENT OF VULVAR CANCER PATIENTS IN UBTH

EDUCATIONAL STATUS	N0	%
Primary School	18	64.3
Secondary School	8	28.6
University	2	7.1
Total	**28**	**100**

FIGURE 2: FIGO STAGE OF VULVAR CARCINOMA CASES AT UBTH

FIGO STAGE	N0	%
1A	0	0%
1B	2	7.14%
2	9	32.1%
3	9	32.1%
4A	5	17.9%
4B	2	7.14%
MISSING STAGE	1	3.57%
Total	**28**	**100**

FIGURE 3: TREATMENT MODALITY FOR VULVAR CA PATIENTS IN UBTH

	Number	Percentage
Surgery		
Hemivulvectomy	7	25%
Excision Biopsy	7	25%
Wide Local Excisiona	4	14.3%
Inoperable (Histology Sample Taken)	10	37.5
Total	**28**	**100**
Chemotherapy		
Had Chemotherapy	16	57.1%
No Chemotherapy	6	21.4%
Missing Record	6	21.4%
Total	**28**	**100%**
Radiotherapy		
Had Radiotherapy	3	10.7%%
No Radiotherapy	19	67.8%
Missing Records	6	21.4%
Total	28	100%

The sociodermographic characteristics of the patients diagnosed with vulvar cancers in the last ten years is revealing. Of the total of 28 patients only 2 (7.14%) had university education. 8 (28.6%) had secondary and or lower diploma education and a total of 18 (64.3%) had only primary or no formal education at all. Since the most favoured aetiological association for vulvar cancer is repeated HPV infection, perhaps low education with its associated poor socio-economic status, poor health seeking behaviour, poor hygiene and multiple sexual partners/polygamous marital settings puts these women at higher risk of developing vulva malignancy.[8,12,15,21]

Gharoro et al have previously found that vulva cancer was the fifth most common genital tract malignancy in UBTH and put its incidence as 3% among gynaecological malignancies.[6] This study has found vulva cancer to be the fourth most common genital tract malignancy in UBTH in the 10 years under review with an incidence of 5.7%. It would appear that there is a rise in the incidence of vulvar cancer or that there are better diagnostic tools or that there is a fall in the incidence of other cancers resulting in perceived rise in incidence of vulvar cancer. Further research is needed to validate these possible conclusions.

The trend of vulva cancer and other gynaecological malignancies has not significantly altered in the last 10 years in UBTH (Chi Square 49.1, P 0.209). Only cervical and ovarian cancers showed yearly change in incidence. This study notes that 78.9% of vulva cancers in UBTH were first diagnosed after the age of 50 supporting the widely held view that it is a disease of atrophy and aging commonly seen around or after the age of menopause.[8,9,21,22,23]Patients with genital tract malignancies and in particularly vulva malignancy present for specialized care in advanced stage of malignancy.[7,15] Many of the patients in this study presented with very advanced FIGO stages 3, 4a and 4b (57.14%). This was the reason why 10 of the patients (35.7%) were inoperable and had only biopsy for histology and palliative radiotherapy with no surgical mode of treatment. 7 (25%) patients had hemivulvectomy, 4 (14.3%) had wide local excision and 7 (25%) had excision biopsy of the lesion site.

In the period under review, 16 (57.1%) of the 28 vulva cancer patients had chemotherapy only or in addition to surgical management. Three patients in these series were referred for radiotherapy to centres with the facility. Since then, UBTH now possesses Radiotherapy facility for vulvar cancer.

This study has shown that patients with vulva cancer are mainly from poor socio-economic background, they are mainly peri or postmenopausal and they had surgery, chemotherapy and or radiotherapy as modes of management.
The study was limited by the its being retrospective and high number of missing records or case notes.

CONCLUSION AND RECOMMENDATIONS

Vulva cancer is the 4th most common cancer of the genital tract diagnosed and managed in UBTH in the 10 years under. Though most patients presented in advanced stage disease, prompt treatment improved the quality of life of patients managed.

Public enlightenment on papsmear, colposcopy/vulvoscopy, the signs and symptoms of early stage cancer especially of the vulva would help encourage

patients to present early thereby improving prognosis. Cancer treatment should be made free or at least highly subsidized so patients can afford treatment and follow-up.

Better record keeping needs to be adapted including computerization of records and online access to authorized personnel.

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