DESCRIPTION OF THE CLINICAL CHARACTERISTICS AND PATHOLOGICAL FINDINGS OF VULVAR LESIONS IN WOMEN WHO HAD SURGICAL EXCISION AT CMJAH BETWEEN 2013-2018

ABSTRACT

Background:

Vulvovaginal complaints are a common reason for gynaecology consultations. The vulvar conditions may be benign (infections, lichen planus or lichen sclerosus), premalignant (vulvar intraepithelial neoplasia, dVIN), or malignant. Vulvectomy is the treatment of choice in most pre-malignant and malignant lesions and occasionally a vulvectomy may be performed for a benign condition such as condyloma accuminata. In most malignant cases a radical vulvectomy and bilateral lymph node dissection are performed in patients diagnosed with late stage disease. Survivors of vulvar cancer suffer severe morbidity and a decrease in quality of life. Common post-operative complaints include lymphedema, sexual dysfunction, and groin discomfort. This study aimed at characterizing women who had vulvar surgery between 2013 and 2018 at Charlotte Maxeke Johannesburg Academic Hospital.

Methods:

This was a retrospective cross-sectional study that conducted at the Gynaecologic Oncology Unit of Charlotte Maxeke Johannesburg Academic Hospital. The study population was women with a vulvar lesion that needed vulvar excision. This included all women who had any type of vulvectomy performed from January 2013 to December 2018.

In total 113 cases met the inclusion criteria and 36 women were excluded. Data were collected from the patients' records using a data collection sheet. The following data were recorded onto the data sheet: age, parity, symptoms, co-morbidities, tobacco use, surgical procedure, and complications of surgery. The histopathological examination of all specimens was performed at the National Health Laboratory Service.

The data were transferred to an Excel spreadsheet and exported into STATA® (Version 13, Texas 77845, USA) for analysis.

Categorical variables were summarised by frequency and percentage. Continuous variables were summarised using means with standard deviation or medians with inter-quartile ranges. For categorical variable comparisons the Chi^2 test or the Fisher's exact test was used. For comparisons of continuous variables, the T-test or the Mann- Whitney-U test was used. Significance was set at a p-value of < 0.05

Results:

The mean age of the 113 women in the study was 44.53 years (SD±12.60); of which 101 (89.38%) were of African descent, 11 (9.73%) women were of Caucasian descent and one (0.88%) was Indian. The median parity of women was two (IQR-1-3; range=0-10). Twenty-seven women (23.89%) were post-menopausal.

The most common presenting symptom was a growth in the vulvar region of 107 (94.69%) women, with pain in 11 (9.73%) women, swelling of the vulva in five (4.42%) women, and dyspareunia was a complaint in two (1.77%) women.

There were 20 (17.70%) women with hypertension, and six (5.31%) had diabetes. Eighty-nine (78.76%) women were HIV positive. There were 38 women with a viral load <20 (copies/ml) and two with a viral load <50 (copies/ml). The median CD4 count was 423 (IQR 249-604; range=2-1215), and the median viral load of women who were not virally suppressed was 100 (IQR 100-1570; range=54-260000).

Forty-one (36.28%) women had a radical vulvectomy and a bilateral inguinal lymphadenectomy. Wide local excision was done in 31 (27.43%) women, simple vulvectomy in 26 (23.01%) women and hemi-vulvectomy in 15 (13.27%) women.

The vulvar histopathology reports showed that 52 (46.01%) lesions were benign and 61 (53.98%) were malignant. Squamous cell carcinoma was found in 59 (52.21%) women. The other two malignancies were one melanoma (0.88%) and one Merckel cell carcinoma (0.88%). Fifty-two (88.13%) histology types were invasive moderately differentiated squamous cell carcinoma, four (6.77%) were poorly differentiated squamous cell carcinoma, and two (1.76%)

were invasive basaloid type squamous cell carcinoma. There were seven women where a benign lesion (vulvar intraepithelial neoplasia and lichen sclerosus) co-existed with squamous cell carcinoma, six were associated with vulvar intraepithelial neoplasia and one was associated with lichen sclerosis. The benign pathology report showed vulvar intraepithelial neoplasia in 32 (28.31%) women.

Conclusion:

More than half of the women had a malignancy. Most of the women with benign histology had vulvar intraepithelial neoplasia. Women with VIN 2 and VIN 3 were mostly treated surgically. The time from symptom onset and surgical treatment was long. The overall complication rate was high. The presence of lichen sclerosus and vulvar intraepithelial neoplasia together with malignancy were found in seven women.