# Skin Warts In Maiduguri, Nigeria: A Pathologic Review

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#### Abstract

Skin warts are common in our environment and accounted for 38.9% of all cases of biopsy skin lesions. The peak age is the 3rd decade of life and predominant in females giving a ratio of 1.7:1 over the males. The perineum and genital is the common site of skin warts (condyloma acuminatum) accounted for 41.9%. The lower limb accounted for 24 while the head and neck, and upper limb accounted for 11 cases each. One case was present on the trunk and 6 cases were unspecified. In conclusion, skin warts are not uncommon in our environment and therefore such lesions should be biopsied for histological diagnosis even when clinically suspected. This is because of the wide spectrum of differential diagnosis.

# INTRODUCTION

The viral lesions of skin most commonly seen histologically are warts and condylomas. However, vesiculobullous lesions caused by herpes simplex and herpes zoster and the varicelliform eruption following vaccination of atopic individuals may occasionally be biopsy<sub>1</sub>. Warts are cutaneous (and sometimes mucosal) lesions caused by one of the several human papilloma viruses (HPV), which are members of the papova group<sub>2</sub>. Several variants of warts occur, depending primarily on the HPV subtype but also on the anatomic features of the region<sub>324</sub>. This study is aimed at describing the pathologic pattern of skin warts in our environment which may also serve as baseline study for further others.

# MATERIALS AND METHODS

A retrospective study of cases of viral skin lesion diagnosed in the department of histopathology, University of Maiduguri Teaching Hospital between January 2000 and December 2005. The specimens received were fixed in 10% formol saline. Several sections were cut, embedded in paraffin wax and cut at 4-5 microns, stained with routine Haematoxylin and Eosin (H&E) stains. Relevant clinical and histopathological data were extracted and analyzed. The clinical data available for each patient include age, sex, clinical diagnosis, and histological diagnoses. The results were presented in simple statistical tables and photomicrographs to demonstrate the morphological pattern.

# RESULTS

A total of 234 skin lesions were biopsies within the study

period, 91 cases were verrucae which accounted for 38.9% of all cases of skin lesions.

Table 1 shows the age and sex distribution of skin warts with virtually every age group was involved. The age ranges between 3 and 75 years. The peak age group was the 3rd decade of life which accounted for 33 (36.3%) cases. There were 57(62.6%) females and 34(37.4%) males giving a ratio of 1.7:1. The peak ages in females and males are 3rd and 4th decades respectively.

Table 2 shows the sex and anatomical site distribution of skin warts with 57 females and 34 males. The genital/perineal warts were the predominant site which accounted for 38 (41.9%) cases and predominantly in females (76.3%). There were 24 cases on the lower limbs; 11 cases on the head and neck, and upper limb each. On e case was found on the trunk and six cases were unspecified.

#### Figure 1

Figure 1: Shows the photomicrograph of condyloma acuminatum in a 27- year-old woman. H&E Stain. X132.



# Figure 2

#### Table 1: Age and Sex distribution of skin warts

Age group	Sex		Total (%)
(Yrs)	Male	Female	
0-9	4	0	4(4.4)
10-19	1	18	19(20.9)
20-29	7	24	31(34.1)
30-39	10	9	19(20.9)
40-49	8	2	10(11.0)
50-59	2	3	5(5.5)
60≥	2	1	3(3.3)
Total	34(37.4%)	57(62.6%)	91(100)

# Figure 3

#### Table 2 : Sex and Anatomical site distribution of skin warts

Site	Sex		Total (%)
	Male	Female	
Perineum/Genital	9	29	38(41.8)
Head/Neck	8	3	11(12.1)
Trunk	0	1	1(1.1)
Upper limb	3	8	11(12.1)
Lower limb	13	11	24(26.4)
Unspecified	2	4	6(6.6)
Total	34	57	91

## DISCUSSION

Verrucae or warts are common viral lesions, which are widespread over the skin and accounted for 95.8% of all viral skin lesions. Majority of the lesions are self-limiting and often regress spontaneously within six months to two years depending on the HPV types<sub>5</sub>. However, clinical diagnosis is not difficult but the histopathologic diagnosis still remains the gold standard.

The autoinoculation of skin warts from other sites to the genital region may occur<sub>6</sub>. Approximately 90% of all genital warts are related to HPV type 6 and 11, which are the least likely to have neoplastic potential. It affect both sex equally, however, overt disease may be more common in men. The diagnosis of genital and anal warts is primarily clinical. The differential diagnosis includes benign or malignant neoplasm (e.g Squamous cell carcinoma in situ, Bowen's disease); Molluscum contagiosum; Condyloma lata; fibroepithliomas and pearly penile papules<sub>7</sub>.

Hassan et al<sub>6</sub> and Attipou et al<sub>8</sub> reported massive and giant condyloma acuminatum in their case report series respectively. Our study showed predominance in female with a 3:1 ratio over the males as shown in table 2, which is explained by environmental factors like Trichomonas vaginalis and Gardnella5. The reason for this increase in our study may be associated to the high increase of cancer of the cervix which is the common cancer in the population. The prevalence is greatest in persons aged 17-33 years, with a peak incidence in persons aged 20-24 years. Our study shows that the peak age incidence is the 4<sup>th</sup> decade of life<sub>9</sub>. However, the prevalence in this study may not be the true reflection of skin warts in our environment because most patient present at the primary health care centre without been biopsied.

The histopathology of skin warts is variable and helpful in the exclusion of other diagnoses of skin lesion. The typical histology of condyloma acuminatum is as shown in figure 1. The skin wart from other site of the body is equally common on the legs, head and neck, and hands.

In conclusion, skin warts are not uncommon in our environment and therefore such lesions should be biopsied for histological diagnosis even when clinically suspected. This is because of the wide spectrum of differential diagnosis.

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