ORIGINAL ARTICLE

Anogenital warts in Northern Nigeria: A ten-year Review

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ABSTRACT

Background: Anogenital warts are a common cause of morbidity affecting mainly the productive age group of the economy. Paucity of data in Nigeria necessitated this study. **Materials and Methods:** The pathology records of anogenital warts diagnosed in the Department of Pathology, Ahmadu Bello University Zaria between 1st January 2000 and 31st December 2009 were reviewed. **Results:** A total of 68 warts were diagnosed within the study period with anogenital warts constituting 39.7%. Majority of cases (62%) were in the 20-39 years age group (range: 5–50 years) and vulva was the most common site affected. **Conclusion:** Genital warts are common in our environment, biopsy of suspicious lesions is recommended for diagnostic yield.

Key words: Anogenital, Nigeria, wart

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INTRODUCTION

Warts are cutaneous and sometimes mucosal lesions caused by one of the several human papilloma virus (HPV) types. Several variants of warts occur depending primarily on the responsible HPV subtype and anatomic location of the lesion. Anogenital warts are HPV-associated warts involving the genital areas, the anal canal and the perineum; and it occurs in both genders. There is paucity of data relating to anogenital warts in our environment, necessitating a study that will serve as baseline for further studies in our setting. This study, therefore, aimed to describe the pattern of anogenital warts in a referral hospital in Northern Nigeria.

MATERIALS AND METHODS

This is a retrospective analysis of pathology records of anogenital warts diagnosed in the Department of Pathology, Ahmadu Bello University Teaching Hospital, Zaria between 1st January, 2000 and 31st December, 2009. Clinical data on each case was extracted from the respective copies of the request cards. The haematoxylin and eosin (H and E)-stained slides were retrieved in each case and reviewed by the authors. Where slides were missing or broken, fresh sections were taken from the paraffin-embedded tissue blocks of the specimens and stained. Relevant clinical and histopathological data were extracted and analysed. The results were presented in simple statistical tables.

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RESULTS

Twenty-seven (27) patients were diagnosed with anogenital warts within the study period representing 39.7% of all patients with warts seen within the same period. The patients' age ranged between 5 and 50 years. Most of the patients (41%) are in their 3rd decade of life. The Male:Female ratio is 1:3. The age and sex distribution is shown in Table 1.

In 15 (75%) of the female patients, the warts are located in the vulva, whereas the most common site in males is the peri-anal region (86%) [Table 2].

Tissue biopsy confirms human papiloma virus (HPV) infection in all the cases. The histological findings include nuclear atypia, koilocytosis, acanthosis, dyskeratosis and multinucleation. The rete ridges of the stratified squamous epithelium are elongated and thickened and chronic inflammatory infiltrate is usually present within the underlying connective tissue [Figure 1].

DISCUSSION

Anogenital warts (*condyloma acuminata)* are exophytic cauliflower-like lesions that are usually found near

Table 1: Age and sex distribution of anogenital warts

Age group (years)	Sex		Total (%)
	Male	Female	
0-9	0	1	1 (3.7)
10-19	1	2	3 (11.1)
20-29	4	7	11 (40.7)
40-49	1	6	7 (25.9)
50+	1	4	5 (18.5)
Total	7	20	27 (100)

Table 2: Sex and anatomical site distribution of anogenital warts

Site	Sex	
	Male	Female
Penile	1	–
Vulva	–	15
Perianal	6	5
Total	7	20

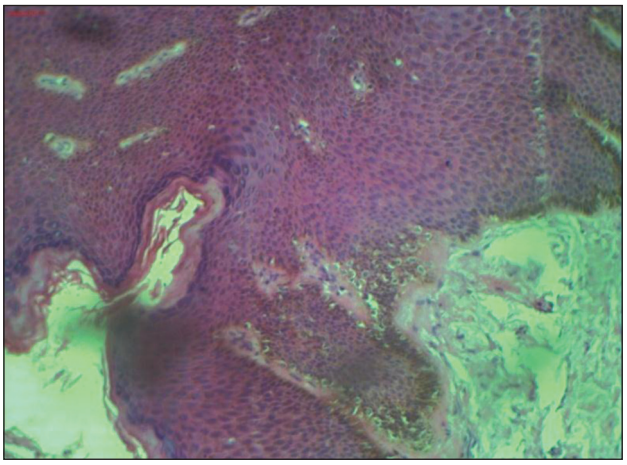

Figure 1: Shows the photomicrograph of condyloma acuminatum in a 24-year-old woman H&E Stain ×100

moist surfaces of the body. They may be observed in the perineum, anal canal, vulva, vagina and the shaft of the penis. Majority of the lesions are self-limiting and often regress spontaneously within 6 months to 6 years of onset of symptoms.[1]

Approximately 90% of all genital warts are related to human papiloma virus (HPV) types 6 and 11 which are least likely to have neoplastic potential.[2]

The differential diagnoses include squamous cell carcinoma, Bowen's disease, Molluscum contagiosum, Condylomata, Fibroepithelioma and Pearly penile papules.[1]

The female preponderance in this study is in keeping with what was reported by Andahi *et al.*,[3] in North-eastern Nigeria, and by Okesola *et al.*,[4] in South-western Nigeria. This may be explained by the increased incidence of warts in patients with veneral infections like *Trichomonas vaginalis* and *Gardnerella,* all of which have been documented to be more common in females.[3]

We found anogenital warts to be more prevalent in the 3rd decade of life. This corresponds with findings in studies elsewhere,[5] and conforms to the general pattern established by previous studies that sexually transmitted diseases are more common in early adulthood.[6]

The predominant affectation of the vulva in females (75%) and anal canal in males (86%) in this study is in keeping with findings of Diclemente *et al.*,[6] The moist vulva area favours the occurrence of genital warts, unlike the male external genitalia which is relatively drier due to less secretions than that of the female. Also, male circumcision which is widely practiced in our environment has a relatively protective effect on genital warts.[7,8]

Although gay sexual practice is reported to increase the incidence of anal warts in the male,[9,10] its contribution to our findings cannot be assessed due to unavailability of such data.

CONCLUSION

Genital warts are common in our environment, biopsy of suspicious lesions is recommended for diagnostic yield.

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