Genital and oral warts co-presentation in a patient attending the sexually transmitted infection clinic in a tertiary facility in Rivers State, Nigeria

Foluke Olukemi Adeniji, Inumanye Nkechi Ojule, Lisa Aleruchi Orianwo

Department of Community Medicine, University of Port Harcourt Teaching Hospital, Rivers State, Nigeria.

Abstract

Background: Human papillomavirus is an ubiquitous virus causing various types of warts, including genital and extra-genital lesions.

Aim: To report a case of co-presentation of genital and extra-genital wart (oral wart) at the University of Port Harcourt Teaching Hospital (UPTH).

Case Report: Case notes of a patient who presented to the Reproductive Health/Sexually Transmitted Disease Clinic, UPTH, between July and September, 2024 with genital and oral warts were reviewed. Clinical features, findings on physical examination, results of investigations, treatment modalities, and outcomes were documented. The case was a 24-year-old man who had several growths in the penis and buccal cavity. In the course of the examination, he had several genital warts of varying consistencies. He received counseling, drug treatment, and podophyllin painting.

Conclusion: Genital and extra-genital warts pose significant physical and psychological burdens. This case report highlights the importance of understanding the diverse presentation of warts and provides good guidance for healthcare workers in the management of warts. Irrespective of the site and type of wart, a good history, exhaustive physical examination, accurate diagnosis, and tailored treatment are crucial for effective management.

Keywords: Warts, genital warts, extra-genital warts, human papillomavirus

Address for correspondence: Dr. Lisa Aleruchi Orianwo, Department of Community Medicine, University of Port Harcourt Teaching Hospital, Rivers State, Nigeria.

Email: lisaorianwo@gmail.com Phone: +2348037243845 **Received:** 19-01-2025, **Accepted:** 15-04-2025

Access this article online	
Quick Response Code:	Website:
ease	www.phmj.org.ng
	DOI: https://doi.org/10.60787 /phmj.v19i1.192

INTRODUCTION

Human papillomavirus (HPV) is a ubiquitous virus responsible for various mucocutaneous manifestations, including genital and oral warts. Genital warts, caused primarily by low-risk HPV types 6 and 11, are a common sexually transmitted infection. Oral warts, although less prevalent, have been linked to HPV types 2, 4, 6, and 11. Globally, an estimated 11-12% of women without cervical abnormalities are

This is an open access journal and articles are distributed under the terms of the Creative Commons Attribution License (Attribution, Non-Commercial, ShareAlike 4.0) -(CCBY-NC-SA4.0) that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal.

How to cite this article: Adeniji FO, Ojule IN, Orianwo LA. Genital and oral warts co-presentation in a patient attending the sexually transmitted infection clinic in a tertiary facility in Rivers State, Nigeria. Port Harcourt Med J 2025;19(1):61-65

infected with the HPV. ^{1,2} The prevalence of the virus is higher in certain regions of the world, such as Sub-Saharan Africa, where approximately 24% of the women are infected by the virus. ² In Africa, cervical cancer accounts for nearly all causes of cancer deaths among women, and HPV is deeply implicated in the cause of the cancer. ³ HPV is very prevalent in Nigeria, leading to cervical cancer, which is the third most common cancer in the

country and the second leading cause of cancer deaths among women. ³ Recent statistics from Nigeria indicates that there are 12,000 new cases of HPV infection and 8,000 deaths among women attributable to HPV infection. ³

The concurrent presence of oral and genital warts poses a diagnostic and therapeutic challenge. The coexistence of oral and genital warts raises essential questions regarding transmission dynamics, immune response, and optimal management strategies. While genital warts are well-documented, oral warts remain understudied, particularly in the context of coinfection. This phenomenon warrants attention due to its implications for patient counseling, treatment approaches, and potential impacts on quality of life. This case report and review explores the incidental finding of oral warts coexisting with genital warts, highlighting this dual presentation, epidemiological, clinical, and therapeutic aspects. By examining the current literature and clinical experiences, we seek to enhance our understanding of this complex condition and inform evidence-based management guidelines.

CASE REPORT

A 24-year-old male student presented to the Reproductive Health and Sexually Transmitted Infections (RH/STI) Clinic UPTH), with a one-year history of multiple growths on his oral cavity, penis and groin region. He suddenly noticed a solitary growth on the upper one-third of his penile shaft. The growth was about the size of a mustard seed, wellcircumscribed, fleshy, immobile, the growth was not painful, non-pruritic, nor discharging purulent, bloody, or serous effluents. After about 3 weeks, he noticed the development of similar growths with sizes ranging from a mustard seed to a grain of rice, which were sparsely distributed around the penile shaft and groin. He also noticed one lesion had a rough and matted appearance. For the above symptoms, he used several antibiotics. ointments, and herbal preparations almost every month since the onset of symptoms. With the persistence of symptoms, he presented to the hospital. His sexual debut was at 16 years, he is heterosexual and has a preference for both vaginal and oral sex. He

has had two intimate relationships, the first lasting about 4years, currently, he has one consistent partner in the last four years but admits to having casual sex, the last episode was about 5 months ago with his only exgirlfriend. He has sexual intercourse, frequently, rarely uses a condom and takes alcohol occasionally.

On examination at presentation, he had several warts developing at the center, base and furrowed ends of the tongue. Normal anatomy of the male external genitalia, with sparsely distributed genital hairs, multiple solitary fleshy smooth growths, and a few others with a cauliflower appearance. Consent was sought from the patient before the pictures were taken. He had no organomegaly and other systemic examinations showed no abnormality. An impression of oral and genital warts was made. Serological screening for retroviral diseases, viral hepatitis, and syphilis were all negative, all other tests were within normal limits. He counseling received on aetiology, predisposing factors, personal hygiene, correct condom use, contact tracing and the modalities of the available treatment options. He was commenced on warm saline gargle twice daily and Acyclovir tablets 400mg thrice daily [4], and had weekly podophyllin painting of the affected areas.



Figure 1: Oral warts (pre-treatment)



Figure 2: Post-treatment of oral warts



Figure 3: Penile warts (pre-treatment)



Figure 4: Post-treatment

DISCUSSION

Human papillomavirus (HPV) infection is one of the most common sexually transmitted

diseases (STDs) in males and females worldwide. 9-11 It is estimated that the lifetime risk of contracting the virus is approximately 90% for men and 80% for women. ^{8,9} HPV which infection is highly contagious, contributes to its high prevalence. Although the primary mode of transmission is via sexual spread, it is easy to get infected by skin-to-skin contact. ⁷ Using genomic sequence, scientists have identified over 200 subtypes of HPV, and they are broadly classified into two subtypes, low-risk HPV and high-risk HPV subtypes. 6,8,10,11 The low-risk subtypes usually cause subclinical infections or benign papillomas, ⁵; they are mostly responsible for extragenital warts on the skin, flat, and plantar warts.⁶

Other presentations related to the low-risk subtypes are oral, anogenital warts, and condyloma acuminata. ¹¹⁻¹³ The high-risk subtypes are mostly associated with cancers, HPV-16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, two of which, type 16 and 18, are responsible for the majority of HPV-related cancers, including cervical, anal, penile, and oropharyngeal cancers. ^{5,6,9} The index patient possibly had a low-risk serotype, considering the site of the lesions.

The index patient had several predisposing factors; an early sexual debut, inconsistent condom use, multiple sexual partners, and his preference for oral sex. In a study by Ogbolu et.al reported from a University in Nigeria on the factors associated with HPV infections and genital warts amongst students and staff, results showed that the majority of the participants reported having had sexual intercourse in their lifetime, and having their first experience between the ages of 15-20 years, and more have had more than 4 partners in a lifetime. ¹⁴ These also corroborate with findings of studies that explored the predictors of HPV among the male and female populations, with sexual debut occurring early ≤ 20 years being common among early and late adolescents in Nigeria, having 1 or more sexual partners before the age of 20 years, and having more than 4 sexual partners in a lifetime.¹⁴

The presentation of warts in the index case partly stems from his poor knowledge of HPV infections, warts, and his preference for oral sex in almost all his sexual activities. Recall that the initial presentation was a solitary wart for which the patient serially abused over-thecounter antibiotics for three months; this singular activity is linked to impaired immune response, which further led to increased susceptibility to infections. In the absence of knowledge about HPV and even in an academic/educational environment, there is a likelihood that there would be cases of HPV infection among a population. Sadly, the male population in society is not aware of their HPV status, thereby causing females to harbor the risk of contracting HPV, and depending on the HPV strain, may further develop into cervical cancer in the future. In a high Human immunodeficiency virus (HIV) burden environment like Rivers State, where social life occasioned by the influx of people from diverse backgrounds for business and other means of livelihood, unprotected sexual encounters with severe consequences are still ongoing despite abundant health information resources made available by the healthcare system. It is important to advocate the menace of this virus and the influence of lifestyle on its acquisition, especially, among the youth and adult population.

Treatment for external warts may be done with the use of podophyllin/ podofilox painting, imiquimod and sinecatechins. Other methods for both genital and oral warts surgery are trichloroacetic acid, excision, cryotherapy and electrocautery.¹⁵ Studies have shown that recalcitrant warts can be treated with intralesional injections of MMR Vaccine. ¹⁶ A study by Balestrieri et al. aimed to demonstrate the effectiveness of an antiviral agent in the treatment of HPV infections, an acyclic guanosine analog, Acyclovir (ACV) or its prodrug Valaciclovir (VCV), originally used for the treatment of HHV-1 and HHV-2, for the treatment of HPV-related diseases. ⁴ They reported the remission of six cases, five cases of penile warts, and a case of remission in a woman affected by cervical, vaginal, and a vulvar giant wart. Similarly, the patient who had both genital and oral warts responded to treatment with ACV.⁴ The literature review shows that when administered either orally, topically, or intralesionally, ACV is effective in treating skin warts; this finding is suggestive of its therapeutic potential in other diseases associated with HPV. The impact of successful treatment warts not only enhances treatment outcomes but also goes a long way to improve patients' satisfaction with a subsequent decrease in the burden of HPV infection. Several studies have posited that more clinical trials are necessary to determine the efficacy of ACV and VCV for HPVrelated diseases. ^{4,7,12}

CONCLUSION

Genital and extra-genital warts pose significant physical and psychological burdens. This case report highlights the importance of understanding the diverse presentation of warts and provides good guidance for healthcare workers in the management of warts. Irrespective of the site and type of wart, history, exhaustive а good physical examination, accurate diagnosis, and tailored including counselling treatment. and behavioural modification are crucial for effective management. It is also imperative to let the patient know that warts are caused by the HPV virus, once infected, the patient stands the risk of re-infection.

Financial support and sponsorship Nil

Conflicts of interest There are no conflicts of interest

REFERENCES

- Bruni L, Diaz M, Casteilsague X, Ferrer E, Bosch FX, Sanjose S. Meta-analysis of 1 million women with normal cytological findings. Cervical human papillomavirus prevalence in 5 Continents. J Infect Dis 2010;202(12):1789-1799.
- 2. Salih MM, Safi ME, Hart K, Tobi K, Adam I. Genotypes of human papilloma virus in Sudanese women with cervical pathology. Infect Agent Cancer 2010;5:26.
- Okunade KS, Nwogu CM, Oluwole AA, Anorlu RI. Prevalence and risk factors for genital high-risk human papillomavirus infection among women attending the outpatient clinics of a university teaching hospital in Lagos, Nigeria. Pan Afr Med J 2017;28(1):227.
- 4. Balestrieri M, Carnovale-Scalzo C, Garbuglia AR, Chiantore MV, Accardi L,

Di Bonito P . Conventional therapy for genital herpes virus and remission of HPV-related lesions: a case series. Infect Agent Cancer 2023;18(1):36.

- Garolla A, Graziani A, Grande G, Ortolani C, Ferlin A. HPV-related diseases in male patients: an underestimated conundrum. J Endocrinol Invest 2024;47(2):261–274.
- 6. Foresta C, Noventa M, De Toni L, Gizzo S, Garolla A. HPV-DNA sperm infection and infertility: from a systematic literature review to a possible clinical management proposal. Andrology 2015; 3(2):163–173.
- Bosch FX, Broker TR, Forman D, Moscicki AB, Gillison ML, Doorbar J, et.al. Comprehensive control of human papillomavirus infections and related diseases. Vaccine 2013;31(Suppl 6):G1-31.
- Szymonowicz KA, Chen J, Biological and clinical aspects of HPV-related cancers. Cancer Biol Med 2020;17(4):864–878.
- Hirth J. Disparities in HPV vaccination rates and HPV prevalence in the United States: a review of the literature. Hum Vaccin Immunother 2019; 15(1):146–155.
- 10. Dunne EF, Park IU. HPV and HPVassociated diseases. Infect Dis Clin North Am 2013;27(4):765–778.
- 11. Petca A, Borislavschi A, Zvanca ME, Petca R, Sandru F, Dumitrascu M. Non-

sexual HPV transmission and role of vaccination for a better future (review). Exp Ther Med 2020; 20(6):186.

- Lenzi A, Mirone V, Gentile V, Bartoletti R, Ficarra V, Foresta C et.al. Rome consensus conference - statement; human papillomavirus diseases in males. BMC Public Health 2013; 13:117.
- Che Q, Li J, Jiang L. Huang X, Zhang M, Lui H, et.al. ALA-PDT combined with cystoscopy: a method to eliminate refractory HPV infection in a patient with condyloma acuminata. Photodiagnosis Photodyn Ther 2020; 31:101763.
- 14. Ogbolu MO, Eniade OD, Majiya H, Kozlovszky M. Factors associated with HPV genital warts: a self-reported crosssectional study among students and staff of a Northern University in Nigeria. Viruses 2024;16(6): 902.
- 15. Leslie SW, Sajjad H, Kumar S. Genital warts.: StatPearls. Treasure Island (FL): StatPearls Publishing, 2024.
- 16. Chauhan PS, Mahajan VK, Mehta KS, Rawat R, Sharma V. The efficacy and safety of intralesional immunotherapy with Measles, Mumps, Rubella Virus Vaccine for the treatment of common warts in adults. Indian Dermatol Online J 2019;10(1):19-26.