Case Report

Bowenoid Papulosis in a Filipino Male: A Compelling Case for Early Detection, Human Papillomavirus Vaccination, and Sexually Transmitted Infection Co-screening amid a Growing Human Immunodeficiency Virus Epidemic

R-Jay F. Agbon, Gilbert C. Yang

St. Luke's Medical Center, Quezon City, Philippines

Abstract

Bowenoid papulosis (BP) is an uncommon yet clinically significant human papillomavirus (HPV)-associated condition that exhibits features of both condyloma acuminata and carcinoma *in situ*. We report the case of a 24-year-old Filipino male with multiple pruritic, pigmented penile lesions of 5 months' duration, confirmed histologically as BP. This case underscores the importance of recognizing HPV-related lesions early and initiating appropriate treatment, not only to prevent progression to malignancy but also to limit transmission. The report also highlights the relevance of offering HPV vaccination, particularly to males, and the critical need for screening for other sexually transmitted infections, especially in light of the growing human immunodeficiency virus epidemic in the Philippines, underscoring that the condition itself may be sexually transmitted in nature.

Keywords: Bowenoid papulosis, human immunodeficiency virus, human papillomavirus, human papillomavirus vaccination, sexually transmitted infections

Address for correspondence: Dr. R-Jay Agbon, #15 Catalina Building, 12th Street, Barangay Damayang-Lagi, Quezon City, Philippines.
E-mail: rjayagbon@gmail.com

Submitted: 07-06-2025, **Revised:** 21-09-2025, **Accepted:** 01-10-2025, **Published:** 20-12-2025.

Introduction

Genital dermatoses can present with a wide spectrum of clinical features, many of which overlap between benign, infectious, and premalignant conditions. Among these, Bowenoid papulosis (BP) represents a diagnostic and clinical challenge. Although it may appear indolent, BP is characterized histopathologically by high-grade squamous intraepithelial lesions and is associated with high-risk oncogenic human papillomavirus (HPV) strains, most notably HPV-16 and HPV-18.[1]

Access this article online	
Quick Response Code:	Website: https://journals.lww.com/jpds
	DOI: 10.4103/JPDS.JPDS_27_25

The importance of early recognition of BP lies not only in preventing potential progression to invasive carcinoma but also in promoting broader sexual health measures, including HPV vaccination and sexually transmitted infection (STI) screening. This case also draws attention to the often-overlooked need for male HPV vaccination and the necessity of heightened vigilance in STI care, particularly in settings where human immunodeficiency virus (HIV) prevalence is increasing.

How to cite this article: Agbon RJ, Yang GC. Bowenoid papulosis in a Filipino male: A Compelling case for early detection, human papillomavirus vaccination, and sexually transmitted infection co-screening amid a growing human immunodeficiency virus epidemic. J Philipp Dermatol Soc 2025;34:74-7.

Case Report

A 24-year-old Filipino male consulted due to multiple pruritic, brown papules on the penile shaft. The lesions began unilaterally on the right side, increased in number over 5 months, and eventually involved the left side. He denied the use of topical or systemic medications and had not previously sought medical consultation.

He had no history of other STIs or immunosuppressive conditions, although he was a patient of the nephrology service being managed as a case of minimal change disease and referred to dermatology for the genital lesions. He was otherwise healthy and denied tobacco, alcohol, or illicit drug use. He also denied a family history of cancer.

His sexual history revealed an early sexual debut at age 11 and approximately 20 lifetime sexual partners. These included mostly females, one transwoman, and one male partner with whom he engaged in insertive anal intercourse. He admitted to inconsistent condom use. He denied a prior history of STIs.

Dermatologic examination [Figure 1] revealed multiple well-demarcated reddish-brown, velvety papules and plaques localized to the penile shaft. There were no lesions on the glans, scrotum, perineal, or anal regions. Dermoscopy was not done.

Differential diagnoses included condyloma acuminatum, lichen planus, seborrheic keratosis, molluscum contagiosum, condyloma lata, and BP.

A punch biopsy of the lesion was performed on the right side of the penile shaft near the base and demonstrated histological features characteristic of BP [Figure 2]. At low magnification (×40), the epidermis showed irregular acanthosis with elongation of rete ridges and mild hyperkeratosis. There was full-thickness keratinocytic atypia with intact basement membrane, suggestive of squamous intraepithelial neoplasia. The architecture was preserved, but dysplastic changes were widespread.

At higher magnification (×100), closer examination of the keratinocytes revealed pleomorphism, hyperchromatic nuclei, and numerous mitotic figures, including atypical forms. The presence of scattered dyskeratotic cells and loss of polarity throughout the epidermis confirmed the diagnosis of carcinoma *in situ*. The underlying dermis showed a mild inflammatory infiltrate without invasion.

Because of the diagnosis, the patient was advised to have screening for other STIs including HIV. He was screened for HIV, syphilis, and hepatitis B, which were all negative.

The patient underwent electrosurgical ablation of the lesions under topical lidocaine anesthesia in a single session. Aftercare included advice to apply mupirocin ointment twice a day for 1 week, cleanse with mild soap, and use paracetamol as needed for intolerable pain. At 1-month follow-up, the treated site showed no recurrence [Figure 3]. Postinflammatory hyper- and hypopigmentation were observed, but there was no scarring or discomfort. The patient reported full resolution of pruritus and was pleased with the outcome.

The patient's condition and its etiology, including the link to HPV, were thoroughly explained. Consequently, HPV vaccination was offered to the patient and his current partner. However, as of writing, the patient has not yet received the vaccine due to financial constraints. The patient was counseled on his current diagnosis and other STIs, safe sexual practices, and the option of preexposure prophylaxis. The patient's current female partner was also advised to undergo screening for similar-looking lesions and for other STIs. His previous partners could not be traced as the patient is no longer in contact with them.

Figure 1: Multiple well-defined reddish-brown papules and plaques on the penile shaft

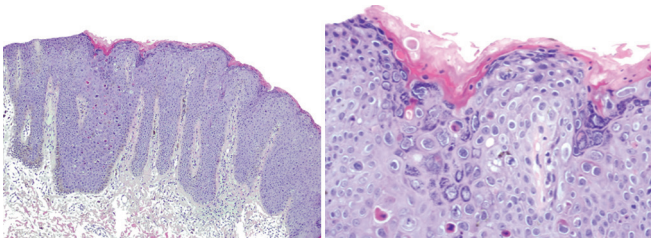

Figure 2: Histopathology of penile lesion. Left (×40): Irregular acanthosis and full-thickness epidermal dysplasia with elongation of rete ridges. Right (×100): Cytologic atypia with hyperchromatic nuclei, loss of maturation, and numerous mitoses including atypical forms. These findings are consistent with Bowenoid papulosis

Figure 3: Postelectrosurgery appearance of the penile shaft at 1-month follow-up. No residual lesions, with only a few postinflammatory hyper- and hypopigmentation noted

Discussion

BP is a premalignant dermatosis that typically affects sexually active individuals in their second to fourth decades of life. It is associated with high-risk HPV types, most commonly HPV-16 and HPV-18, which are implicated in over 50% of penile cancers.[1,2] While the clinical course is often benign and lesions may regress spontaneously, histological findings resemble carcinoma *in situ*. This justifies treatment and close monitoring.

BP presents as well-demarcated, flat or verrucous, reddish-brown papules most commonly on the penile shaft but may also involve the glans, scrotum, or perianal skin. Although lesions may be asymptomatic, patients often report pruritus or discomfort. Dermoscopic features of BP include linear brown-grey dots at the periphery.[3]

HPV exerts its oncogenic potential through E6 and E7 proteins, which inactivate the tumor suppressor proteins p53 and Rb. This molecular mechanism explains the histopathological findings of dysplasia and mitoses in BP and raises concern for potential malignant transformation. Although invasive squamous cell carcinoma arises in <1% of cases, the risk is higher among immunocompromised individuals such as HIV-positive patients.[1,4] This patient, however, tested negative for HIV.

Despite the proven efficacy of quadrivalent and nonavalent HPV vaccines in preventing genital warts, penile intraepithelial neoplasia, and even penile cancer, male vaccination rates remain low, particularly in resource-constrained settings like the Philippines.[5] A study by Goldstone *et al.* revealed a 90% efficacy of quadrivalent HPV vaccination against genital warts in men and a 77.5% reduction in anal intraepithelial neoplasia. These findings reinforce the vaccine's value not only in cervical cancer prevention but also in protecting men from HPV-related disease.[6]

This patient, unvaccinated and sexually active, represents a missed opportunity for primary prevention. Broader vaccine access and education, especially among males and men who have sex with men, are urgently needed. Targeted efforts to increase awareness and normalize male vaccination can significantly reduce the burden of HPV-related conditions across all genders and orientations.

Although public health campaigns have predominantly focused on female populations due to the link between HPV and cervical cancer, male populations remain both vectors and victims of HPV infection. Penile cancer, though rare, carries significant morbidity. In addition, vaccinated males contribute to herd immunity and reduce transmission to partners. Therefore, shifting the paradigm to include universal vaccination, regardless of sex or sexual orientation, is a necessary step toward comprehensive HPV control.

There is no universally accepted gold standard treatment for BP. Management typically depends on lesion size, location, patient preference, and physician expertise. Treatment goals include symptomatic relief, cosmetic clearance, and prevention of malignant transformation. In this case, electrosurgical ablation was selected due to its availability, cost-effectiveness, and capacity for immediate lesion removal with minimal downtime.

Electrosurgery is particularly useful for small- to moderate-sized lesions and allows for precise tissue destruction while preserving surrounding healthy tissue. Compared to topical therapies such as imiquimod 5% cream, which requires prolonged application and patient compliance over several weeks, electrosurgery offers rapid results. However, imiquimod remains a valuable noninvasive option, especially for patients with multifocal or extensive lesions, and has demonstrated immunomodulatory benefits that may reduce recurrence.

Photodynamic therapy, particularly with 5-aminolevulinic acid, has shown efficacy in BP, offering good cosmetic outcomes and recurrence control, but is often limited by cost and availability.[7] Laser ablation, such as CO_2 or Er:YAG lasers, also provides effective lesion clearance and precise control but requires specialized equipment and trained personnel.

Ultimately, the choice of therapy should be individualized. In this case, electrosurgery achieved excellent clinical results without recurrence at one-month follow-up, reinforcing its utility as a first-line option for localized lesions in immunocompetent patients.

This case of a 24-year-old sexually active Filipino male with a 5-month history of biopsy-confirmed BP highlights the importance of early detection and comprehensive management. The uniqueness of this case should be emphasized, as published reports from Asian or specifically Philippine populations are limited. The patient's inability to receive the vaccine due to financial constraints is a stark reminder of the social and economic barriers that impede public health initiatives in resource-limited settings. This highlights the dilemma of financial barriers and inaccessibility to the vaccine in certain populations, a common issue in the Philippines where the cost and limited availability of HPV vaccines remain major hurdles.

Given the country's growing HIV epidemic, routine screening for HIV and other STIs in patients with HPV-related lesions is vital. Co-infection with HIV and HPV leads to more extensive and recalcitrant lesions and significantly raises the risk for anogenital malignancies.[3,8] Providing integrated sexual health services is therefore essential.

As healthcare providers, dermatologists have a key role in educating patients, promoting HPV vaccination, and ensuring early diagnosis and comprehensive care. Addressing these gaps will help reduce the burden of HPV-related diseases and improve public health outcomes across all populations.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initials will not be published, and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Chamli A, Zaouak A. Bowenoid papulosis. In: StatPearls. Treasure Island (FL): StatPearls Publishing; 2021.
2. Kang S, Amagai M, Bruckner AL, Enk AH, Paller AS, Watsky KL, *et al*. Fitzpatrick's Dermatology in General Medicine. 9th ed. New York: McGraw-Hill Education; 2019.
3. Errichetti E, Stinco G. Dermoscopy in general dermatology: A practical overview. Dermatol Ther (Heidelb) 2016;6:471-507.
4. Palefsky JM. Human papillomavirus-related disease in people with HIV. Curr Opinion HIV AIDS 2017;12:26-34.
5. Elst L, Albersen M. HPV vaccination: Does it have a role in preventing penile cancer and other preneoplastic lesions? Semin Oncol Nurs 2022;38:151284.
6. Goldstone SE, Giuliano AR, Palefsky JM, Lazcano-Ponce E, Penny ME, Cabello RE, *et al*. Efficacy, immunogenicity, and safety of a quadrivalent HPV vaccine in men: Results of an open-label, long-term extension of a randomised, placebo-controlled, phase 3 trial. The Lancet. Infectious diseases 2022;22:413-25. [doi: 10.1016/S1473-3099(21)00327-3].
7. Wu YH, Qiao JJ, Bai J, Fang H. Aminolevulinic acid photodynamic therapy for bowenoid papulosis. Indian J Dermatol Venereol Leprol 2015;81:219-20.
8. UNAIDS. Philippines HIV Country Factsheet. Geneva: UNAIDS; 2023.