

Coexistence of giant condyloma acuminatum with conjunctival papilloma in a young Yemeni female

Abstract

A 44-year-old Yemeni female with a 2-year history of pemphigus vulgaris managed with oral prednisolone, azathioprine, and topical steroids presented with a 3-month history of an exophytic growth in the anogenital area. Clinical examination revealed a cauliflower-like exophytic mass involving the perianal region, extending to the labia majora and pubic region. Additionally, a skin-colored papilloma was noted on the left lacrimal caruncle, consistent with human papillomavirus infection. Conjunctival papilloma in association with giant condyloma acuminatum has previously been reported only once. The patient underwent successful electrosurgical excision followed by a 30% trichloroacetic acid peel. Four weeks of oral acitretin therapy and topical imiquimod 3.75% cream yielded moderate improvement. To our knowledge, this represents the first reported case of a female patient with pemphigus vulgaris on immunosuppressive therapy presenting with a coexisting caruncular papilloma.

Keywords: condyloma, conjunctival papilloma, Yemeni female, pemphigus vulgaris, immunosuppressive therapy

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Abbreviations: GCA, giant condylomata acuminata; HPV, human papillomavirus; HIV, human immunodeficiency virus

Introduction

Buschke-Löwenstein tumors are slow-growing, giant condylomata acuminata (GCA), typically ranging from 10 to 30 cm in diameter and primarily involving the anogenital region. They are caused by sexually transmitted oncogenic human papillomavirus (HPV) types 6 and 11.¹ Although locally aggressive and capable of extensive tissue destruction, these tumors exhibit a low metastatic potential and are classified as verrucous carcinomas, a well-differentiated subtype of squamous cell carcinoma with minimal metastatic risk.² Grossly, the lesion presents as a large erythematous, fungating, cauliflower-like mass.³

Case report

A 44-year-old female with a 2-year history of pemphigus vulgaris (maintained on 20 mg of oral prednisolone on alternate days, 50 mg of azathioprine twice daily, topical mometasone, and mupirocin ointment) presented with a 3-month history of an exophytic growth in the anogenital area. Dermatological examination revealed a cauliflower-like exophytic mass completely covering the perianal area and extending to the labia majora and pubic region (Figure 1a– Figure 1c). Additionally, a skin-colored papilloma was noted on the left lacrimal caruncle, consistent with an HPV-induced wart on the conjunctival mucous membrane (Figure 1d & Figure 1e). GCA in association with pemphigus vegetans has only been previously reported once in a male patient. The present case represents the first reported instance of GCA associated with pemphigus vulgaris and accompanied by an additional caruncular papilloma in a female patient; this particular constellation of findings is distinctive and has not been reported previously.



Figure 1a Cauliflower-like plaques involving the perianal and perineal regions, with smaller digitiform nodules distributed along the periphery.



Figure 1b Digitate, warty, cauliflower-like nodules on the vulva, labia minor, and labia major.



Figure 1c Warty, light-to-dark brown, cauliflower-like tumors on the vulva, pubic area, labia minor, and labia major.

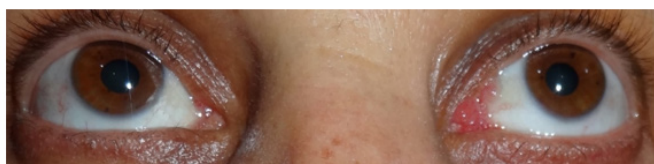


Figure 1d A papillomatous lesion on the left medial canthus, with the right medial canthus appearing unremarkable.

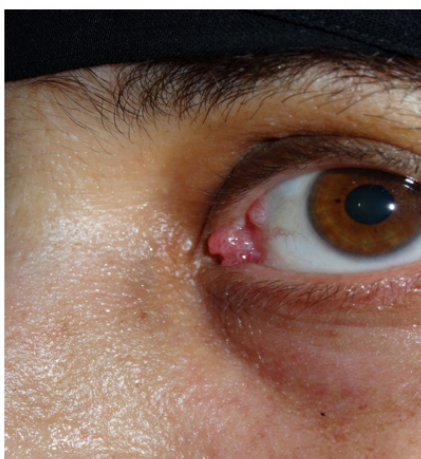


Figure 1e Close-up view showing a skin-colored plaque on the medial canthus.

Discussion

GCA was first described in 1896 by Buschke on the penises of three male patients, and was further elaborated by Buschke and Loewenstein in 1925 as a separate entity. It is an uncommon clinical variant of genital warts, characterized by locally invasive growth into the underlying dermal structures, despite its benign appearance in histopathology.³ Immunosuppression, whether congenital or acquired (due to human immunodeficiency virus [HIV] infection or iatrogenic causes, as in this case), reduces local immune control of HPV infection (which is usually self-limiting), promoting viral proliferation and resulting in large CA lesions.⁴ This finding supports the crucial role of CD4⁺ T cells in controlling HPV infection. The incidence of CA is reported to be 5–7 times higher in HIV-positive individuals compared with immunocompetent persons.⁴

GCA typically presents as a benign, extensive, cauliflower-like lesion that primarily affects the anogenital area, especially in

immunosuppressed patients.⁵ In rare instances, the lesions may extend to the anorectal region. Local radical resection is considered essential for curative treatment as it is usually nonresponsive to chemotherapy and radiotherapy. For unknown reasons, GCA occurs more frequently in males than females, with a male-to-female ratio of 2.7:1.⁶ Fewer than 150 female cases have been documented to date, making the current case uncommon.

The present patient was immunocompromised due to medications taken for pemphigus vulgaris over the previous 2 years. Her GCA lesions appeared suddenly 3 months before presentation and progressed to involve the entire anogenital area, extending to the labia major, pubic region, and right thigh. A skin punch biopsy confirmed the characteristic histopathological findings of GCA. Given the patient's immunosuppressed status, she was initially started on oral acitretin (25 mg/day) along with topical imiquimod 5% cream (twice weekly). This regimen has been reported, either alone or in combination with other topical, or systemic treatments, to be beneficial in several reports. Moderate lesion regression was observed after 4 weeks of treatment. Consequently, she underwent electrosurgery followed by a 30% trichloroacetic acid peel. Upon wound healing, topical 5-fluorouracil (once daily, 5 days/week) and topical imiquimod 1% (twice weekly) were introduced, resulting in excellent clinical improvement within 6 weeks.

Conclusion

This case adds to the existing literature as the first reported instance of a female patient receiving immunosuppressive therapy for pemphigus vulgaris who developed GCA, accompanied by a concurrent conjunctival (caruncular) papilloma. Suárez-Ibarrola et al., reported a 3.8-year-old male with BLT, associated with caruncular papilloma, but who was not immunosuppressed, as was the case our patient. Thomas et al., reported a 63-year-old male undergoing immunosuppressive treatment for pemphigus vegetans who developed BLT; unlike our case, he did not have pemphigus vulgaris or caruncular papilloma. The rare association in the present case underscores the potential for opportunistic HPV-related proliferation in immunocompromised individuals and highlights the importance of thorough mucocutaneous examination in such patients.

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Conflict of interest

The authors declare there is no conflict of interest.

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