

Giant Condyloma Acuminata (Bruschke-Loewenstein Tumor): Case Report and Literature Review

Aristóteles Maurício Gomes Ramos¹, Carolina Viana Bueno Gomes², Carolina Passos Arrigoni², Felipe de Oliveira Blackman Fernandes³ and Antônio Chambô Filho⁴

¹Surgeon, Hospital Santa Casa de Misericórdia de Vitória, Vitória, ES, Brazil.

²Medical Resident, Department of Obstetrics and Gynecology, Hospital Santa Casa de Misericórdia de Vitória, Vitória, ES, Brazil.

³Medical Intern, Escola Superior de Ciências da Santa Casa de Misericórdia de Vitória, Vitória, ES, Brazil.

⁴MD, PhD, Full Professor, Escola Superior de Ciências da Santa Casa de Misericórdia de Vitória and Head of the Department of Obstetrics and Gynecology, Hospital Santa Casa de Misericórdia de Vitória, ES, Brazil.

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*Correspondence:

Carolina Viana Bueno Gomes, Hospital Santa Casa de Misericórdia de Vitória, R. Dr. João dos Santos Neves 143, Vila Rubim, 29025-023 Vitória, ES, Brazil, Tel: +55 27 997541454.

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ABSTRACT

Introduction: Giant condyloma acuminata is a relatively rare sexually transmitted disease caused by human papillomavirus. Also known as Buschke-Lowenstein tumor (BLT), the treatment of choice is still controversial. BLT is a rare variant of condyloma acuminata and differs by presenting with locally invasive growth, lack of spontaneous resolution, high recurrence even after treatment and low potential for malignant transformation. In the case described in this report, we used a combination of electrocautery and a surgical scalpel to resect a huge condyloma. Furthermore, this disease is rare and no controlled studies exist, radical excision of this anogenital lesion is generally recommended as the first line therapy and close vigilance and follow-up are essential. The purpose of this report is to present the case, discuss an overview of etiopathogenesis, clinical presentation, diagnosis, and management of giant condyloma acuminata.

Case: The present report describes a clinical case and discusses their rarity, clinical diagnosis, histopathology and immunohistochemistry findings and the treatment of a patient with giant condyloma acuminata. The data were collected at a hospital in Vitória, Espírito Santo, Brazil.

Conclusion: Giant condyloma acuminata is rare; however, when present, importance of timely detection, effective management, and close surveillance to improve patient outcomes. Electrocautery resection is an effective and successful treatment modality for giant condyloma acuminata.

Keywords

Condyloma acuminata, Bruschke-Lowenstein tumor, Human papillomavirus, Vulvar infections.

Introduction

Giant condyloma acuminata is a rare form of presentation of HPV infection, used by a significant growth of exophytic warty lesion in the genital region. Also known as the Buschke-Löwenstein

tumor, it was first described in 1896 by Buschke in a penile lesion. The literature describes this tumor as low rates of malignant transformation, neoplasm of invasiveness of adjacent structures, with benign histological characteristics, without metastatic potential. It has a low prevalence in the general population, with a ratio of 2.3 men to each woman. Vaccination is the most effective method of prevention, but early diagnosis and treatment prevent the potential for invasion, the significant growth of the

wart lesion and the best predicted prognosis. Medical and surgical approaches are commonly utilized to treat this condition. Reports have demonstrated the utility of medical approaches, including chemoradiotherapy and immunotherapy. Physically ablative therapies such as cryotherapy, electrocautery, simple resection, and CO₂ laser therapy are often highly effective in the short term, but the recurrence rate after these therapies can be high. In this report, we present a case of giant condyloma acuminata responsive to electrocautery resection therapy.

The internal review board of the School of Sciences of the Santa Casa de Misericórdia de Vitória (EMESCAM) approved this case report under reference CAAE 20455519.6.0000.5065. Informed consent forms were signed granting permission to publish the report of these case.

Case

A 50-year old, brown-skinned, multiparous woman presented to the hospital with an episode of lipotymia due moderate volume bloody discharge from an extensive lesion located in perianal area that had progressively enlarged over two years. The patient informed that she never had been medical evaluation until when she notice blood oozing from it because she was ashamed to seek help. She did not remind when the lesion had initially started. The lesion had increased in size over the months and had extended into the vulva and perineal region. It was not painful but caused a lot discomfort mainly during sitting and in defecation. She reported no fevers, loss of weight, urinary symptoms. In admission reviews of systems were essentially unremarkable. She denied previous promiscuous behavior and was in a monogamous relationship with his husband who haven't had sexual intercourse at last 10 years.

On examination, patient was afebrile and hemodynamically stable. An extensive solid, tender and fixed cauliflower-like lesion, measuring 20 × 25 cm (width × length) apparent in the perineum and perianal area, with foul-smelling, pinkish color overlapping with small areas of tissue necrosis, extending from the vulva into the intergluteal cleft (Figures 1 and 2).



Figure 1: Extensive solid, tender, pinkish color cauliflower-like lesion apparent in the perineum and perianal area, with foul-smelling, with small areas of tissue necrosis, extending from the vulva into the intergluteal cleft.



Figure 2: Another vision of the lesion appeared as exophytic cauliflower-shaped like verrucous mass.

Remainder of the physical examination was normal. Laboratory investigation revealed leukocytosis (white blood cell count 23,000 per mm³), hemoglobin 10.5 mg/dL, and platelet count 630,000 per mm³. Renal and liver function tests were normal. Human immunodeficiency, hepatitis B and C and syphilis serological tests for were all nonreactive. Urine analysis and blood cultures were unremarkable. The patient denies previous or family history of HPV infection or cervical cancer.

The diagnosis of giant condyloma acuminata of Buschke-Löwenstein was suspected due the clinical presentation. The lesion was excised by electrofulguration (Figure 3) and the parts of the specimen was sent for pathological and histopathology analysis (Figure 4).



Figure 3: Immediate postoperative after electrofulguration procedure in surgical center under sedation.



Figure 4: Result 30 days after fifth electrocautery resection therapy.

Macroscopically, the lesion appeared as exophytic cauliflower-shaped like verrucous mass. It was tender in consistency. In order to verify oncogenic potential, an in-situ hybridization immunohistochemical analysis was performed for HPV 6,11 (positives); 16, 18, 31, 33, 35 (negatives). Eight sessions of electrofulguration were performed in a surgical center under sedation. At the present time, she has been monitored for 17 months for control of recurrences.

Discussion

Giant condyloma acuminata, also known as Buschke-Löwenstein tumor is a rare form of presentation of HPV infection. The literature reports used by a significant growth of exophytic warty lesion with low rates of malignant transformation, neoplasm of invasiveness of adjacent structures, with benign histological characteristics, without metastatic potential. It has a low prevalence in the general population, with a ratio of 2.3 men to each woman.

Vaccination is the most effective method of prevention, but early diagnosis and treatment prevent the potential for invasion, the significant growth of the wart lesion and the best predicted prognosis. Medical and surgical approaches are commonly utilized to treat this condition. Reports have demonstrated the utility of medical approaches, including chemoradiotherapy and immunotherapy. Physically ablative therapies such as cryotherapy, electrocautery, simple resection, and CO₂ laser therapy are often highly effective in the short term, but the recurrence rate after these therapies can be high. Early detection of the disease and close vigilance and follow-up could have led to a better outcome in our patient.

Due to its rarity and lack of controlled studies, the optimal management for BLT has not been defined. In this report, we present a case of giant condyloma acuminata responsive to electrocautery resection therapy. A close operation lasted only one hour, and the patient got out of the bed and was mobile on the first postoperative day. She was discharged on the third day after the operation. For our patient, topical therapy with

podophylla, imiquimod or fluorouracil was not indicated, as these treatments are not recommended for very large warts. After one year of follow-up, the patient was still satisfied with the treatment. Considering patient's social condition and desire of the patient was only performed an electrocautery resection therapy.

Other surgical approaches electrocautery resection does not require any postoperative topical therapy, as the entire infected epithelium is excised surgically. Further research is necessary to demonstrate the optimal depth of cautery ablation for genital lesions.

Conclusion

Giant condyloma acuminata is rare; however, when present, importance of timely detection, effective management, and close surveillance to improve patient outcomes. No standard approach currently exists for the management of this condition, and the choice of treatment mainly depends on the preferences of the patient and/or physician.

For our patient we only performed surgical excision. Regrowth of the lesion three weeks after the operation was expected. Electrocautery resection is an effective and successful treatment modality for giant condyloma acuminata.

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