Giant condyloma (Buschke-Löwenstein tumor). A case report

J. Hicheri, K. Jaber, M. R. Dhaoui, S. Youssef, A. Bouziani, and N. Doss

SUMMARY

Buschke-Löwenstein tumor (BLT), or giant condyloma acuminatum, is a rare sexually transmitted disease. The virus responsible for condyloma is human papillomavirus, usually serotype 6 or 11. A BLT is always preceded by condyloma acuminatum and may occur at any age after puberty. It is characterized by invasive growth and recurrence after treatment, and malignant transformation is possible. We report the case of a 44-year-old male patient with a 2-year history of a penoscrotal Buschke-Löwenstein tumor.

KEY WORDS

Buschke-Löwenstein tumor, giant condyloma, case report

Introduction

Buschke-Löwenstein tumor (BLT), or giant condyloma acuminatum, was first described by Buschke in 1925. It is a rare sexually transmitted disease; the incidence is probably 0.1% in the general population. It is characterized by invasive growth and recurrence after treatment, and malignant transformation is possible. We report the case of a 44-year-old male patient with a 2-year history of a penoscrotal BLT.

Case report

A 44-year-old male patient with no notable medical history consulted us for a voluminous, exophytic, cauliflower-like verrucous tumor of penoscrotal location and extension to the perineal area (Figure 1). The tumor had evolved progressively for 2 years and resulted in itching and bleeding. An extensive surgical excision was performed and a diagnosis of giant condyloma acuminatum with medium-grade dysplasia was confirmed by histopathological examination. It revealed verrucous, ortho- and parakeratotic epidermis, acanthosis, and a marked papillomatosis. The cells displayed a vacuolized cytoplasm with irregular and large nuclei (koilocytes). The epidermis was spreading into the dermis, but without signs of a true invasion. A polymorphous dermal inflammatory infiltrate was also noted (Figure 2).

Discussion

BLT is a rare sexually transmitted disease, triggered by human papillomavirus (HPV), usually genotype 6 or 11 (1). Risk factors for HPV transmission are: multiple sexual partners, prostitution, homosexuality, lack of hygiene, and chronic genital infections.

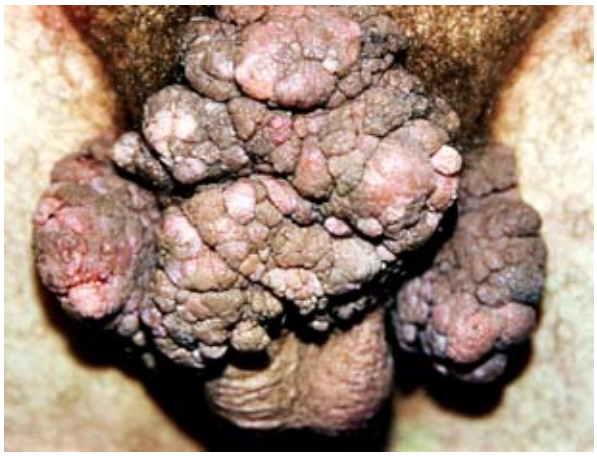

Figure 1. Voluminous, exophytic, cauliflower-like verrucous tumor, of penoscrotal localization, extending to the perineal area.

BLT is always preceded by condyloma acuminatum, and the immune system is probably suppressed. It can be associated with congenital or acquired immunodeficiency (AIDS) including alcoholism, diabetes, or chemotherapy with immunosuppressive therapy (2).

BLT occurs at any age after puberty, usually between the 4th and 6th decades (3). Males are more frequently involved, the M/F sex ratio being 3.3. It is located on the penis in 81 to 94% of cases, in the anorectal area in 10 to 17%, and in the urethra in 5%. In females, the location is chiefly the vulva (90%) and an anorectal location is less frequent (3).

Clinically it appears as a large, cauliflower-like, white or yellow tumor of papillomatous and irregular surface, eventually exceeding 10 cm^2 (2).

Histopathology reveals papillomatosis and severe acanthosis. The hyperplastic epithelium is usually well differentiated; however, there are vacuolated epidermal cells displaying clear cytoplasm and hyperchromatic nuclei. The basal membrane is intact, and a lymphohistiocytic inflammatory infiltrate is present in the upper dermis (1).

The biopsy should be deep enough to comprise the entire tumor and especially the epidermal/dermal interface.

Differentiation between BLT and verrucous carcinoma is difficult. Some authors consider these lesions to be similar. However, others maintain that BLT represents an intermediate lesion between condyloma acuminatum and verrucous carcinoma, referring to it as a condyloma-like precancerous lesion (2). The common differential diagnoses are: Bowen's disease (its dyskeratotic condylomatous form), keratotic pseudoepitheliomatous balanitis, and squamous cell carcinoma.

BLT can be complicated by superinfection, fistulae, or necrosis. Spontaneous regression is exceptional, and recurrence after an incomplete excision is frequent. Bleeding, infiltration of the tumor basis, or lymph node enlargement may cause the clinician to suspect a malignant transformation into micro-invasive carcinoma or into well-differentiated keratinizing squamous cell carcinoma, which occurs in about 30% of cases.

Surgery is the treatment of choice and is effective in the early stages of the disease. Excision must be wide and the Mohs technique is often used (3, 4). Lymph node dissection is indicated only in cases of suspected malignant transformation.

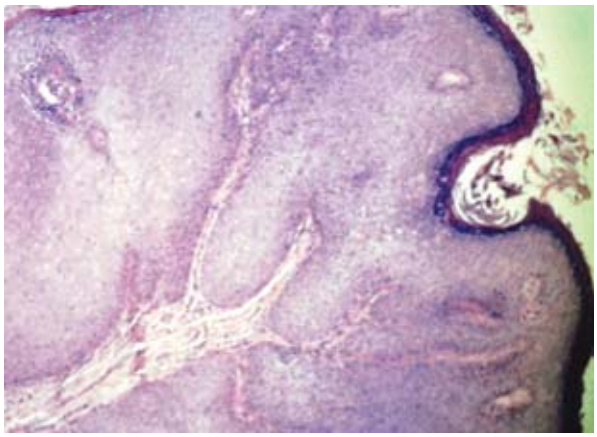

Figure 2. Ortho- and parakeratosis, acanthosis, and papillomatosis of the epidermis (20 ×).

Radiotherapy is rarely used; if so, usually when excision is not recommended or in recurrences. It may also be indicated to complement surgery in the case of an incomplete excision. It has been suspected of being responsible for the alteration of BLT into aplastic carcinoma. Chemotherapy may be helpful in reducing the tumor mass (3–5). Sometimes it is recommended that reduction of the tumoral mass through radiotherapy or chemotherapy precede surgical excision.

Post-treatment clinical monitoring is strongly suggested.

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AUTHORS' ADDRESSES

Jihene Hicheri MD, Dermatologist, Department of Dermatology, Service de dermatologie, Hôpital Militaire Principal d'instruction de Mont-Fleury CP 1008 Tunis, Tunisia, E-mail: hicherijihene@yahoo.fr
Kahena Jaber MD, Assistant Professor of Dermatology, same address
Mohamed Raouf Dhaoui MD, Professor of Dermatology, same address
Soumaya Youssef MD, Assistant Professor of Dermatology, same address
Ammar Bouziani MD, Head of the Department of Histopathology, same address
Nejib Doss MD, Head of the Department of Dermatology, same address