

Buschke-Löwenstein Tumor: Report of a New CaseKamal Moufid^{1*}, Abderrezak Benazzouz, MD², Omar Ghoundale, PhD³, Driss Touiti⁴

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Abstract: Giant condyloma acuminatum also known as Buschke-Löwenstein tumour (BLT) is regarded as an entity intermediate between an ordinary condyloma acuminatum and squamous cell carcinoma. We report the case of a 65-year-old male patient with a 22 years history of a penoscrotal BLT managed by surgical excision alone.

Keys words: condyloma acuminatum, Buschke-Löwenstein tumor, excision.

INTRODUCTION

Condyloma acuminatum (CA), a viral genital wart, is a common sexually transmitted disease that affects the anogenital region of male and female patients and has increased in frequency over the last few years. Giant condyloma acuminatum (GCA) also known as Buschke-Löwenstein tumour (BLT) is regarded as an entity intermediate between an ordinary condyloma acuminatum and squamous cell carcinoma [1, 2]. It is associated with extensive local infiltration and a high propensity to recur. We report the case of a 65-year-old male patient with a 22 years history of a penoscrotal BLT managed only by surgical excision.

CASE PRESENTATION

A 65-year-old heterosexual african male was referred to us for exophytic, papillary lesions involving pubic and perineum region. The mass is painless and located on the roof of the penis, with some warts on the perineum [Figure 1]. The first presentation of the lesions was reported 22 years ago by the patient. The mass had grown slowly over the years, with itching, ulceration associated and foul-smelling discharge noted with time. The perianal region was normal. The patient was otherwise healthy.

No inguinal lymphadenopathy was detected clinically or by computed tomography of the pelvis and inguinal region. Biochemical and serological investigations including HIV were normal. The tumor was excised with minimal margins at the deep layer of adipose tissue.

Histological examination of the complete operative specimen confirmed the presence of BLT without evidence of degenerative development [Figure 2]. No adjuvant treatment was given. The clinical course was favorable, and no local recurrence was observed at 12 months follow-up.

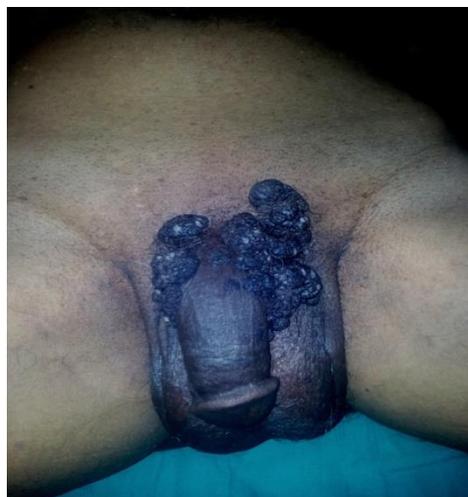


Fig-1: cauliflower-like verrucous tumor of penoscrotal localization, extending to the perineal area

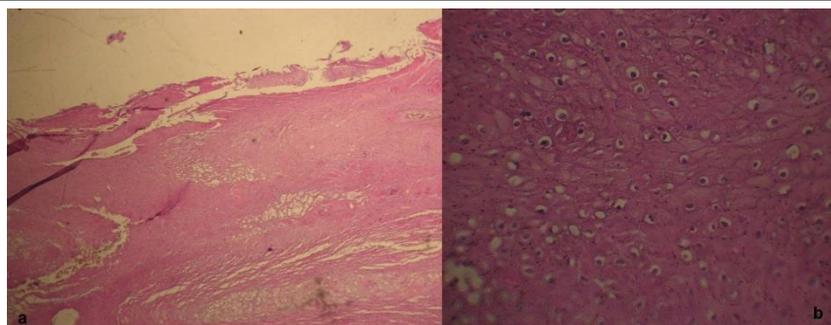


Fig-2: Characteristic features of condyloma accuminata a) Malpighien proliferation with superficial strates of ortho and parakeratosis keratin.(H&E, original magnification × 40) b) Koilocytic change with perinuclear halos, peripheral condensation of cytoplasm and nuclear atypia (H&E, original magnification, ×400)

DISCUSSION

In 1925, Buschke and Lowenstein described the first case of pseudo-epitheliomatous giant condyloma of the glans penis as large, papillomatous, cauliflower-like and often ulcerated growths with necrotic areas, without atypical cells and not determining spread [3].

It's thought to be induced by human papillomavirus (HPV), most commonly HPV types 6 and 11 and occasionally types 16 and 18 [1, 2]. This lesion can be found on any ano-genital surface, including the penis vulva, vagina, rectum, scrotum, perineum, and bladder. HPV can be transmitted via several pathways: sexual contact, autoinoculation or contact with infected materials. Differentiation between BLT and verrucous carcinoma is difficult and its clinical presentation is still matter of debate [1, 2].

Risk factors for HPV transmission are: multiple sexual partners, prostitution, homosexuality, lack of hygiene and chronic genital infections. Whenever it is found in children, sexual abuse must be investigated. [4] Our patient did not have any of these risk factors. BLT can occur at any age, although it is most commonly seen in man between 40 and 60 years of age. The incidence is estimated to 0.1% in the general population. The sex ratio reported is 2.3/1 [1].

Clinically it appears as a large, cauliflower-like, white or yellow tumor of papillomata's and irregular surface, eventually exceeding 10 cm². 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 [4-6]. The gross appearance is generally a bulky tumor suggesting an aggressive behavior, whereas histopathology reveals a relatively low-grade malignancy [5, 6]. Although it is a benign disease, it carries a risk of malignant transformation and there are also reports of malignant transformation into squamous carcinoma after decades of growth. The natural history and behavior of the lesion is poorly understood and

persistent recurrences with formation of fistulas and sinuses are frequently reported [1, 2].

Surgery is the treatment of choice and is effective in the early stages of the disease with a higher success rate (63%-91%) and lower relapse rate[1-7]. The risk of recurrence after excision is 60–66%. Malignant transformation has been reported in 30–56% of cases. [1] Partial penectomy with a 2-cm margin has traditionally been the treatment suggested for tumors involving the glans penis, with total penectomy indicated when the tumor involves a larger part of the penile shaft. [5] Hatzichristou *et al.*, performed glansctomy as the procedure of choice to preserve the maximal possible functional length of the penis when the tumor is exclusively confined to the glans [7].

Other modalities including radio-chemotherapy, topical and intra-lesional chemotherapy, laser and photodynamic therapy have all been used in different combinations in the treatment of BLT with varying success [8]. The administration of an autogenous vaccine after surgical excision is associated to the lowest reported recurrence rates at one year (less than 5%)[9].

In the presence of micro-invasion with healthy resection margins and staging by clinical examination and complementary investigations, treatment essentially consists of regular surveillance. The treatment is more complex for the cases of BLT that transforms to verrucous carcinoma. Lymph node dissection is indicated only in cases of suspected malignant transformation [1, 5, 6]. Patients with BLT should be closely monitored so that dysplastic changes can be diagnosed at an earlier stage.

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