# Buschke-Lowenstein Tumor or Giant Acuminous Condyloma Cininical and Therapeutic Aspect about a Case (At the Mohamed V Rabat Military Training Hospital)

F'Adama Condé<sup>\*</sup>, João Peti Angelo, Jamali Mounir, Akim Kogui N'Douro, Melang Mvomo Thomas Alexis, Omar Jendouzi, Ahmed Ameur, Mohammed Alami

Service of Urology, Military Hospital of Instruction Mohamed V, Hay Ryad - 10100 RABAT, Morocco

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#### \*Corresponding author: F'Adama Condé

Abstract	Case Report

The Buschke-Lowenstein tumor (TBL) or giant condyloma acuminata (GAG) is a tumor of viral origin with predominantly sexual transmission. A rare nosological entity 0.1%. Affecting men in 80% of cases and developing on the sexual organs perineum in women, the manifestation is in about 90% on the vulva. The contributing factors are the multiplicity of sexual partners, repeated infections, and decline in humanity. The condition phase is characterized by a cauliflower or rooster's crest tumor. Treatment is primarily surgical, followed by clinical and histological monitoring. We report a clinical case of giant condyloma acuminata at the Military Hospital of Instruction Mohamed V Rabat from 01/15/2021 TO 01/22/2021, the patient is operated with favorable outcome: seen on D 30 post-op.

**Keywords:** BUSCHKE and LOWENSTEIN's tumor, diagnosis, therapy, monitoring.

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## INTRODUCTION

Buschke-Lowenstein tumor (TBL or giant condyloma acuminata is a tumor of viral origin caused by the human papillomavirus (HPV), mainly genital. It is a rare disease, sexually transmitted. It has been for the first written in 1896 by BUSCHKE then reported by LOWENTEIN in 1925 hence its name BUSCHKE-LOWENSTEIN tumor.

TBL or CAG is a rare clinical entity of viral origin, transmitted mainly by sexual route. The risk of local invasion, the strong recurrent power and the degenerative potential explains its seriousness.

The treatment is poorly codified and essentially surgical. We are reporting a clinical case to you at the urology department of the Mohamed 5 Rabat military instruction hospital; no sexual behavior has been reported, the patient is treated surgically, TBL confirmed by anatomy pathology the evolution was favorable.

## **CLINICAL OBSERVATION**

MONSIEUR X, 57 years old, married, with a history of type 2 diabetes on oral antidiabetic drugs and urethritis, without notion of homosexuality consulted for budding masses with scrotal, inguinal, penile localization, accompanied by pruritus.

As a little story, the beginning of the symptomatology went back 15 years with the gradual installation of masses at multiple locations (scrotal, inguinal, penis) in cauliflower and crest of the hull. Physical examination on admission found itchy cauliflower and ridge masses in the scrotum, inguinal, and penis (Fig. 1).

The rest of the examination (digital rectal examination and lymphonodal areas) is unremarkable. The sexually transmitted infection (TPHA, VDRL; serology for chlamydia, HIV,) is negative. A total resection of tumors of the root of the penis, on the penis, bilateral inguinal region and perineal fig. (2,3 and 4).

Favorable operative follow-up. The patient leaves on D2 postoperative. The patient is seen postoperatively with good healing.

### Histological examination of the excisional parts

Bottle number 1: Eight skin fragments measuring between  $10 \times 1.5$  cm with a greyish-white papillomatous appearance, without visible ulceration.

Offering the microscopic study and polyploid warty structure showing relief accidents between elevation and deep invaginations made up of a hyperplastic and papillomatous epithelial coating surmounted by a thick horny orthokeratotic layer and made of polyhedral cells with spines. Some of the mostly superficial entries have a koilocyte morphology with sometimes bi-nucleation. The underlying fibrous dermis contains discrete lymphocytic infiltrates retaining the histologic type of a giant condyloma acuminata (Buschke and Kuwaiti tumor) with no sign of malignancy. (Fig. 4, 5 and 6). Bottle number 2: a cutaneous fragment measuring 15x8 cm, same histological result.



Fig-1: Cauliflower scrotal perineum tumor and rooster crest



Fig-2: Aspects of the resected fragments



Fig-3: Aspects of the resected fragments



Fig-4: Macroscope aspects after resection



Fig-5: Appearance of condyloma with presence of coilocytes which are witnesses of HPV infestation at high coarseness



Fig-6: Appearance of condyloma with presence of coilocytes control of HPV infestation at low coarseness



Fig-7: Appearance of condyloma with presence of coilocytes and grossly moderate hyperkeratinization



Fig-8: Appearance at D 30 postoperative

## **DISCUSSION**

Bushke and Lowentein's tumor (TBL) or giant condyloma acuminata (GAG) is а pseudoepitheliomatous proliferation belonging to the group of vertucous carcinoma. The first description dates back to 1896 by BUSCHKE then taken up again in 1925 by LOWENTEIN [1]. This tumor is considered a benign condylomatous tumor due to frequent association with HPV 6; 11 and the lack of secondary localization for some authors [2]. For others, such as a borderline tumor because despite the absence of signs of histological malignancy, it can invade neighboring organs through perforation.

TBL behaves like a malignant tumor with a tendency to compress and displace adjacent structures, with repression but without invasion of the basal lamina [2]. TBL is a rare nosological entity that affects 0.1% of the population [2]. This tumor occurs after puberty between the 4th and 6th decade [3].

This essentially male pathology in 80% of cases. It affects the penis in uncircumcised patients and is favored by lack of hygiene. In women it is vulvar in 90% [2].

The role of immunity is currently well known. The appearance of several condylomata in immunocompromised populations and their persistence is mainly related to cellular immune deficiency [3]. Humoral immunity is very important in neutralizing viruses and preventing the spread of HPV infection. The regression remains linked to cellular immunity.

In the literature, TBL cases associated with CD4 lymphocytopenia, treatment with immunosuppressants, HIV infection, corticosteroid therapy, diabetes, TBC, alcoholism. All these cases have in common an immunosuppression, the pregnant woman is a state of immune impairment to note.

Sexually transmitted and virology: the role of HPV has been proven in condylomata acumines and currently in TBL, especially HPV 6 .11 HPV16 and 18 [4]. HPV 6 and 11 are most often found although a few

cases of 16 and 18 have been described. The 6 and 11 are low risk oncogenes.

Transmission occurs sexually with a cofactor: the multiplicity of sexual partners, repeated local infection. Patients should have work-ups for other sexually transmitted infections namely TPHA, VDRL, hepatitis A, B, C, HIV 1 and 2 and chlamydia serology.

Histologically, TBL is a perfectly limited malignant tumor characterized by considerable epithelial hyperplasia sometimes pseudoepithelialiomatous with the basement membrane still intact, hyperacanthosis, hyperpapillomatous, and koilocytes which are pathognomonic markers of infection by HPV, however, is not constant [5].

Clinically, GACs most often begin with small, rounded, thread-like lesions that are pinkish or of normal skin color. The duration of the transformation varies, ranging from a few months to several years.

In the state phase, a large tumor is observed, which may exceed 10 cm in its long axis, irregular papillomatous with a surface bristling with digitation, budding like a cauliflower, often whitish or yellowish in color, often presenting additional infectious lesions [2]. The presence of bleeding, infiltration of the base or the presence of lymphadenopathy infiltration of the base or the presence of lymphadenopathy should suggest malignant degeneration [2, 3].

In light microscopy, TBL is a perfectly limited squamous tumor characterized by considerable epithelial hyperplasia sometimes pseudoepitheliomatous with the basement membrane still intact, hyperacanthosis, hyperpapillomatous and koilocytes which are pathognomonic markers of HPV infection but not always present [2].

Identification of HPV can be performed in ano – genital warts by electron microscopy. Immunohistochemistry methods and finally the molecular biology technique either hybridization or PCR.

This during PCR remains the most sensitive and widely used method, often showing the presence of DNA from HPV 6 and 11 [3].

Warty and vegetative TBL, NICOLA FAVRE's disease, donovanosis, or inguinal granuloma or anogenital amebiasis can mimic the clinical stage of TBL [2-4].

TBL has progressive risks, local invasion, malignant transformation and local recurrence. Regarding degeneration [2,3], the boundary between TBL and verrucous carcinoma remains imprecise. This is how authors [4,5] have recently qualified these as precancerous condylomatoid.

Malignant transformation of TBL is estimated to be 8.5% to 23.8% [5]. The most common histological type is represented by squamous cell carcinoma [5].

Treatment should be as early as possible with close monitoring, since the evolution of this tumor is unpredictable due to its invasive, recurrent and degenerative power.

The objective of this treatment should be: removal of the tumor in its entirety, fight against viral infection, improve the immune status, cut the chain of transmission.

The hope remains a definitive cure, without sequelae and with a quality of life; other treatments such as radiotherapy, cryotherapy, electrocoagulation, carbon dioxide laser, topical local treatments with podophyline, systemic interferon.

Systemic bleomycin or methotrexate chemotherapy is a therapeutic alternative, even if it only results in regression, which is often incomplete.

The standard treatment remains surgery and allows histological analysis of the entire part with search for a site of degeneration. The excision should be as large as possible, removing a margin of healthy tissue confirmed by pathological examination. Total amputation of an organ including the rectum may be necessary in cases of infiltrating TBL or the vulva. Lymphondal dissection is not recommended in cases of malignant degeneration, which is very rare. Ensure clinical (loco-regional) and prolonged histological monitoring. The development of a prophylactic vaccine remains a prospect for the future. It is necessary to note the management of the partner and the prevention.

#### **CONCLUSION**

Bushke and Lowentein's tumor (TBL) or giant condyloma acuminata (GAG) is a rare nosological entity, of viral origin and sexually transmitted, most often requiring early surgical treatment and regular postoperative, clinical and histological monitoring.

We recommend the prevention of STIs through sex education of young people through safe sex. The vital and functional prognosis that may involve

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