Case Report
Volume 6:6, 2022

Clinical and Medical Case Reports

ISSN: 2684-4915 Open Access

Buschke-Löwenstein Tumour with Anorectal Location in Immunocompetent Patients

F. Zahra Cheikhna*, A. Benzzine, F. Haddad, F.Z. Elrhaussi, M. Tahiri, W. Hliwa, A. Bellabah and W. Badre

Service de Gastro-entérologie, Ibn Rochd, Casablanca, Morocco

Abstract

Buschke lowenstein tumor (BLT) or giant condylomas acuminata (GCA) is relatively rare. It is caused by papillomavirus, and in particular by HPV serotypes 6, 11. It most commonly occurs in immunocompromised males. It is characterized by the frequency of recurrence and the risk of malignant transformation and the treatment remains essentially surgical.

We report the case of twelve patients treated for anorectal TBL, eleven of whom were immunocompetent. Based on this study and a review of the literature, we will describe this condition's epidemiological, therapeutic and evolutionary aspects. The originality of this study lies in the fact that this pathology has been diagnosed in immunocompetent patients.

Keywords: Buschke-Löwenstein tumor • Anorectal location • Immunocompetent patients

Introduction

Buschke-Lowenstein tumor (TBL) or giant condyloma acuminata, is a rare clinical entity, of viral origin, transmitted mainly by sexual means [1]. Its first description dates back to 1896. It was in 1925 that Buschke and Löwenstein made it a characterized entity [2]. The frequency is currently estimated at 0.1% of the general population. Degeneration affects only 8-25% of TBLs [3]. It is a proliferation of pseudo-epitheliomatous aspect which evolves towards extension on the surface and in depth or even malignant degeneration. Its treatment remains essentially surgical.

The aim of this work is to describe the epidemiological, therapeutic and evolutionary aspects of this condition.

Methods

We report a retrospective and descriptive study of twelve patients who were treated for anorectal TBL, over a period of 9 years, from January 2011 to December 2019. These patients underwent a proctologic examination, an assessment of sexually transmitted infections then surgical treatment followed by an anatomopathologic study of the operating specimen. Statistical analyses were performed using Excel software.

Results

This study involved twelve patients. The average age was 47 years with extremes ranging from 22 to 60 years. We noted a male predominance, eight patients being male and four female, the sex ratio being 2. Only one patient was followed for HIV infection.

***Address for Correspondence:** F. Zahra Cheikhna, Service de Gastro-entérologie, Ibn Rochd, Casablanca, Morocco, Tel: 00212699973923, E-mail: zcheikhna02@gmail.com*

Date of Submission: 27 May, 2022, Manuscript No. cmcr-22-70450; **Editor assigned:** 28 May, 2022, PreQC No. P-70450; **Reviewed:** 06 June, 2022, QC No. Q-70450; **Revised:** 16 June, 2022, Manuscript No. R-70450; **Published:** 25 June, 2022, DOI: 10.37421/2684-4915.2022.6.213.

The eleven immunocompetent patients had no particular pathological history (In particular no diabetes, no chronic diseases and no corticosteroid therapy).

A large papillomatous tumour was found in all our patients. The size varies between 5 and 17 cm. The genital organs were invaded in 25% of the patients. In addition, we objectified intracanal involvement in 16.6% of all patients.

All of our patients have undergone surgical treatment. Eleven patients underwent wide excision of the lesions and one patient underwent palliative resection of the TBL which was invading the sphincter system. Electrocoagulation has been indicated for intracanal lesions.

All lesions were diagnosed as giant condyloma acuminata and low-grade dysplasias were found in 1 case.

The evolution was good in nine patients with a complete remission maintained. A patient who presented a local recurrence of the lesions underwent surgical revision and the pathological examination was in favor of a giant condyloma acuminata then the evolution was good with complete remission. Two cases of anal stenosis have been reported in patients who had intraductal extension treated by electrocoagulation and who were in complete remission, these patients received treatment by anal dilation using candles.

Discussion

Buschke and Lowenstein in 1925 were the first to describe the bulkiness of giant condyloma acuminata and the term Buschke and Lowenstein tumor was thus born [2].

TBL is a relatively rare condition and always preceded by condyloma acuminata. Its frequency is estimated at 0.1% of the general population [4-6]. The diagnosis is most often made in adults. The vast majority are infected during the first sexual intercourse [7]. The average age of our patients is 47, which reflects their young age. There is a male predominance, 8 patients being male and 4 female, the sex ratio being 2. Risk of occurrence in men aged 18 to 44 [8,9]. Immunosuppression, chronic inflammation, poor hygiene and HIV infection appear to be risk factors for this condition [10-12]. Human Papilloma Virus (HPV) infection is widely implicated in the development of TBL and essentially low oncogenic risk genotypes (especially 6 and 11) [13]. Most immunocompetent patients clear the virus, in some it persists in a quiescent state in the deeper layers of the epidermis. The contraceptive pill, intercurrent infections, parity and smoking promote this persistence. Immunosuppression can reactivate the virus and inhibit its clearance [14]. The preponderant place of

this disease in proctology consultation has recently been confirmed for the HIV population. In our study, 11 patients were immunocompetent and only 1 patient was followed for HIV, which does not agree with the data in the literature which dictate that this pathology is more frequent in the immudepressed, in particular patients infected with the human immunodeficiency virus [HIV].

TBL is most often located in the external genitalia and mainly in the penis. The anorectal localization remains less frequent but it is not uncommon. In our series, the localization at the level of the anal margin is constant. The genital organs were invaded in 25% of the patients. In addition, we objectified intracanal involvement in 16.6% of all patients.

Clinically, CAG most often begins as small rounded or threadlike lesions that are pinkish or of normal skin color. The duration of the transformation is variable, ranging from a few months to several years. In the state phase, we observe a large tumor (which can exceed 10 cm on the long axis) (Figure 1) papillomatous, irregular, with a surface bristling with digitations, budding, cauliflower-shaped, often whitish or yellowish in color, often presenting superficial ulcerations and added infectious lesions [15,16], its extension can be towards the scrotum or the vulva, the intergluteal groove, the buttocks, or even the rectum and the pelvis. On the surface it can give rise to an enormous tumor of about ten centimeters. In depth, the tumor evolves by destroying and pushing back neighboring structures without infiltrating them [4,11,17,18]. A large papillomatous tumor was found in all our patients. The size varies between 5 and 17 cm.

Histologically, it is a perfectly limited squamous tumor, characterized by considerable epithelial hyperplasia, sometimes pseudo-epitheliomatous, hyperacanthosis, hyperpapillomatosis and koilocytes which are pathognomonic markers of HPV infection, however their presence does not is not constant. The basal membrane remains intact, which proves the benignity of the tumor despite its malignant behavior [5,18,19].

The search for other sexually transmitted infections is systematic (HIV, chlamydia trachomatis, syphilis) [5,11]. In our series, all the patients benefited from an assessment of sexually transmitted infections, no case of association with HIV was reported except for a single patient who was followed for HIV.

The treatment appears to be uncodified and no strategy is available at the moment. Surgery remains the gold standard in the treatment of TBL. Complete excision avoids the recurrences that characterize the evolution of this tumour. Although the histology of the tumor is in favor of benignity, the excision must be early, large, carrying the entire surface and deep tumor and allowing histological analysis in search of degeneration [2,5]. In perianal locations, excision with preservation of the sphincter and reconstruction is carried out as often as possible, but more serious interventions such as amputation of the rectum or abdominoperineal amputations are sometimes necessary [17] .

All of our patients have undergone surgical treatment. Eleven patients underwent wide excision of the lesions and one patient underwent palliative resection of the TBL which was invading the sphincter system. Electrocoagulation has been indicated for intracanal lesions.

All lesions were diagnosed as giant condyloma acuminata and low-grade dysplasias were found in 1 case.

Figure 1: Large papillomatous tumor.

The evolution was favorable in nine patients with complete remission. A patient who presented a local recurrence of the lesions underwent surgical revision, the pathological examination was in favor of a giant condyloma acuminata then the evolution was favorable with complete remission. The two cases of anal stenosis that have been reported in patients who had benefited from coagulation for intraductal extension and who were in complete remission were treated by anal dilatation using candles.

This study reports twelve cases of BLT tumour, including eleven cases in immunocompetent patients. This suggests that this pathology can be found even in immunocompetent patients.

Conclusion

Buschke-Lowenstein tumor (or giant condyloma acuminata) is a rare tumor requiring early and extensive surgical treatment with regular post-surgical, clinical and histological monitoring. Its prevention is imperative based on the treatment of condyloma acuminata and the fight against sexually transmitted diseases.

Conflict of Interest

No conflicts of interest.

Author Contributions

I confirm that all authors of the manuscript have read and agree to its contents and that the reproducible material described in the manuscript would be freely available to all scientists wishing to use it for non-commercial purposes.

References

1. Frega, Antonio, Patrizia Stentella, Alessia Tinari, and Aldo Vecchione, et al. "Giant condyloma acuminatum or buschke-Lowenstein tumor: review of the literature and report of three cases treated by CO_2 laser surgery. A long-term follow-up." *Anticancer Res* 22 (2002): 1201-1204.
2. Buschke, A., and Ludwig Loewenstein. "Über carcinomähnliche condylomata acuminata des Penis." *Klinische Wochenschrift* 4 (1925): 1726-1728.
3. Charaf, K., K. Elfadil, Z. Samlani, A. Diffaa, and K. Krati. "Tumeur de Buschke-Lowenstein anorectale dégénérée: trois nouveaux cas." *J Africain d'Hépato-Gastroentérologie* 6 (2012): 112-115.
4. Gillard, Pieter, Olivier Vanhooteghem, Bertrand Richert, and Michel De La Brassinne. "Tumeur de Buschke-Löwenstein." *Ann Dermatol Venereol* 132 (2015): 98-99.
5. El Mejjad, Amine, Mohamed Dakir, Mohamed Tahiri, and Hichame Attar, et al. "Le condylome acuminé géant-tumeur de Buschke Lowenstein (à propos de 3 cas)." *Prog Urol* 13 (2003): 513–517.
6. Bocquet, H and M. Bagot. "Tumeurs bénignes d'origine virale." *Dermatologie. Encycl Med Chir Paris: Elsevier* (1998): 12-725.
7. Ho, Gloria Y.F., Robert Bierman, Leah Beardsley, and Chee J. Chang, et al. "Natural history of cervicovaginal papillomavirus infection in young women." *N Engl J Med* 338 (1998): 423-428.
8. Giuliano, Anna R., Ji-Hyun Lee, William Fulp, and Luisa L. Villa, et al. "Incidence and clearance of genital human papillomavirus infection in men (HIM): a cohort study." *Lancet* 377 (2011): 932-940.
9. Giuliano, Anna R., Eduardo Lazcano-Ponce, Luisa L. Villa, and Roberto Flores, et al. "The human papillomavirus infection in men study: human papillomavirus prevalence and type distribution among men residing in Brazil, Mexico, and the United States." *Cancer Epidemiol Biomarkers Prev* 17 (2008): 2036-2043.
10. Kasmaoui, Elhassane, Mohamed Lezrak, Ahmed Ameur, and Hassan Jira, et al. "Tumeurs de Buschke Loewenstein à localisation génitale. À propos de quatre observations." *Ann Urol* 36 (2002): 211-216.

11. Rabii, R., A. Joual, B. Bellabidia, and K. Skalli-Dehbi, et al. "Condylome acuminé scrotal géant: à propos d'un cas." *Ann Urol* 35 (2001): 67-70.

12. Juan, Hsu-Cheng, Maw-Chang Sheen, Tsung-Yi Huang, and Chun-Chieh Wu, et al. "Giant condyloma acuminatum of penis with cancer transformation." *Formos J Surg* 44 (2011): 237-240.

13. Aubin, François, Jean-Luc Prétet, Anne-Carole Jacquard, and Maelle Saunier, et al. "Human papillomavirus genotype distribution in external acuminata condylomata: a Large French National Study (EDiTH IV)." *Clin Infect Dis* 47 (2008): 610-615.

14. Moscicki, Anna-Barbara, Mark Schiffman, Ann Burchell, and Ginesa Albero, et al. "Updating the natural history of human papillomavirus and anogenital cancers." *Vaccine* 30 (2012): F24-F33.

15. Reichenbach, I., A. Koebele, B. Foliguet, and M. Hatier, et al. "A Buschke and Lowenstein tumor in a female patient." *J Gynecol Obstet Biol Reprod* 24 (1995): 491-495.

16. Villote, J., G. Benhamou, G. Alcabes, and C. Vissuzaine, et al. "Tumeur de Buschke-Löwenstein anorectale (condylomatose géante) nécessitant une amputation du rectum." *Gastroenterol Clin Biol* 13 (1989): 105-107.

17. Lévy, A., and C. Lebbe. "Prise en charge des tumeurs de Buschke-Löwenstein." *Ann Urol* 40 (2006): 175-178.

18. Tytherleigh, M. G., A. J. Birtle, C. E. Cohen, and R. Glynne-Jones, et al. "Combined surgery and chemoradiation as a treatment for the Buschke-Löwenstein tumour." *Surgery* 4 (2006): 378-383.

19. Li, Adrienne LK, Scott Walsh, and Douglas R. McKay. "Surgical management of a giant condyloma of Buschke-Löwenstein in a patient with Netherton syndrome using the pedicled anterolateral thigh flap-A case report." *J Plast Reconstr Aesthet Surg* 64 (2011): 1533-1536.

How to cite this article: Cheikhna, F. Zahra, A. Benzzine, F. Haddad and F.Z. Elrhaussi, et al. "Buschke-Löwenstein Tumour with Anorectal Location in Immunocompetent Patients." Clin Med Case Rep 6 (2022): 213.