

International Journal of Urology Research www.urologyjournal.in Online ISSN: 2664-6625; Print ISSN: 2664-6617 Received: 06-07-2019; Accepted: 20-07-2019; Published: 09-08-2019 Volume 1; Issue 2; 2019; Page No. 01-02

Bushke Lowenstein Tumor

Kaoutar Laamari^{1*}, Hanane Baybay², Samia Mrabat³, Zakia Douhi⁴, Sara Elloudi⁵, Fatima Zahra Mernissi⁶, Soufiane Ennaciri⁷, Moulay Hassan Farih⁸

^{1, 2, 3, 4, 5, 6,} Department of Dermatology, Hassan II University Hospital, Fes, Morocco ^{7, 8} Department of Urology, Hassan II University Hospital, Fes, Morocco DOI: <u>https://doi.org/10.33545/26646617.2019.v1.i2a.8</u>

Abstract

Buschke-Lowenstein tumor is a relatively rare sexually transmitted disease. It is a neoplasm of the anogenital region which has benign appearance on histopathology but is locally destructive. It carries a high recurrence rate and a significant potential for malignant transformation. Human papilloma virus has been implicated as an etiologic agent for this tumor.

Keywords: Buschke Löwenstein tumor, giant condylomata acuminata, human papillomavirus

Introduction

Verrucous carcinoma of the skin and mucosa is an uncommon type of well-differentiated squamous cell carcinoma. When it is present in the genitoanal region the term used is Buschke-Lowenstein tumor $^{[1, 2]}$.

Buschke-Löwnestein tumor (BLT) or giant condylomata acuminata (GCA) is a rare sexually transmitted disease caused by human papillomavirus (HPV), especially types 6 and/or 11, with an estimated infection rate of 0.1% of the general population and with a male predominance. It is characterized by its degenerative potential and invasive character and by recurrence after treatment [3, 4].

We report a case of a bushke lowenstein tumor in a male patient.

Case report

An 58-year-old man presented to our department with a perigenital mass. Physical examination revealed a foul-smelling 20 x 15 cm verrucous cauliflower-like ulcerated mass originating from the perigenital skin (Figure 1). on dermoscopic examination, we found some polymorphous vessels, rosettes, ans papillomatous aspect. (Figure 2) A biopsy was performed. Histologic examination revealed squamous epithelial verrucous proliferation with marked papillomatosis and acanthosis. Tumor cells exhibited vacuolized cytoplasm with irregular and large nuclei consistent with koilocytes. No atypia or dysplasia was found at the histologic examination. These findings were consistent with a giant condyloma acuminata also known as Buschke-Lowenstein tumor.

The patient the patient was referred to urology for complete exision.



Fig 1: A foul-smelling 20 x 15 cm vertucous cauliflower-like ulcerated mass originating from the perigenital skin



Fig 2: Some polymorphous vessels, rosettes, ans papillomatous aspect

Discussion

BLT, first described by Buschke and Lowenstein in 1925. They observed a penile lesion that clinically resembled both common condyloma acuminata and squamous cell carcinoma, but differing from both of them regarding the biological behaviour and the histopathological appearance ^[5].

Since then, it has also been reported in the anorectal and perineal regions.

While the characteristic feature of Buschke-Lowenstein tumor (BLT) is benign appearance on histopathology, the lesion has locally destructive behaviour and may undergo malignant transformation ^[6, 7].

It is a sexually transmitted disease with an estimated incidence of about 0.1% in the general population. Human papilloma virus (HPV) has been linked to the etiopathogenesis of BLT. HPV DNA types 6 and 11 have been most commonly recovered from pathological specimens of BLT, suggesting a pathogenic role ^[8]. Features of Buschke–Loewenstein tumours are ulcerated, fungating masses, and the characteristic histological pattern is showing both endophytic and exophytic growth with undulating papillomatosis of densely keratinized, well-differentiated squamous epithelium. CT scans can be used to demonstrate the exact location and extent of BLTs ^[11].

Most authors recommend the radical surgical excision, allowing a complete histological examination and assessment of tumor-free resection margins. Other adjuvant treatment modalities could be of interest to avoid mutilating surgical interventions such as laser, radiotherapy, intralesional interferon alfa, or topic imiquimod ^[13, 14, 15].

Vigilant and prolonged surveillance is suggested. This is important because this tumor has been reported to have a significant rate of recurrence (66%) and malignant transformation (56%) with an overall mortality of 20%. The tumor may also form abscesses and fistulae in the perianal region

Conclusion

Buschke-Löwnestein tumor is a very rare sexually transmitted disease characterized by giant slow growing condyloma acuminatum that is, unlike simple condyloma, locally aggressive and destructive. It is fairly easily diagnosed. Treatment is poorly codified and remains essentially surgical. Sex education and early treatment of condylomatous lesions improve the prognosis.

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

References

- 1. Lévy A, Lebbe C. Buschke-Löwenstein tumour: diagnosis and treatment. Ann Urol (Paris). 2006; 40:175-178.
- 2. Chao MW, Gibbs P. Squamous cell carcinoma arising in a giant condyloma acuminatum (Buschke-Lowenstein tumour) Asian J Surg. 2005; 28:238-240.
- 3. Steffen C. The men behind the eponym-Abraham Buschke and Ludwig Lowenstein: giant condyloma (Buschke-Loewenstein). A J Dermatopathol. 2006; 28:526-36.
- 4. Buschke A. Condylomata acuminata in Neisser, A (ed): Stereoscopischer Medicinischer Atlas. Kassel, Germany, T Fischer, 1896, plate 61.
- 5. Talwar A, Puri N, Singh M. Giant condyloma acuminatum of Buschke and Lowenstein: successful surgical treatment. Int J STD AIDS. 2010; 21(6):446-448.
- 6. Ahsaini M, Tahiri Y, Tazi MF. "Verrucous carcinoma arising in an extended giant condyloma acuminatum (Buschke-Löwenstein tumor): a case report and review of the literature," Journal of Medical Case Reports. 2013; 7:273.
- Creasman C. Haas PA, Fox Jr TA, Balazs M. "Malignant transformation of anorectal giant condyloma acuminatum (Buschke-Loewenstein tumor)," *Diseases of the Colon & Rectum.* 1989; 32(6):481-487.
- 8. Lévy A, Lebbe C. "Buschke-Löwenstein tumour: diagnosis and treatment," Annales d'Urologie. 2006; 40(3):175-178.
- Balazs M. Buschke–Loewenstein tumour: a histologic and ultrastructural study of six cases. Virchows Arch A. 1986; 410:83-92
- Geusau A, Heinz-Peer G, Volc-Platzer B, Stingl G, Kirnbauer R. Regression of deeply infiltrating giant condyloma (Buschke- Löwenstein tumor) following longterm intralesional interferon alfa therapy. Arch Dermatol. 2000; 136:707-710.
- 11. Frega A, Stentella P, Tinari A, Vecchione A, Marchionni M. Giant condyloma acuminatum or buschke-Lowenstein tumor: review of the literature and report of three cases treated by CO2 laser surgery. A long-term followup. Anticancer Res. 2002; 22:1201-1204.
- 12. Schwartz RA. Verrucous carcinoma of the skin and mucosa. J Am Acad Dermatol. 1995; 32:1-21
- Creasman C, Haas PA, Fox TA Jr, Balazs M. Malignant transformation of anorectal giant condyloma acuminatum (Buschke-Loewenstein tumor) Dis Colon Rectum. 1989; 32:481-487.