ECRONICON OPEN ACCESS

EC GASTROENTEROLOGY AND DIGESTIVE SYSTEM

Research Article

Buschke-Lowenstein Tumor of the Ano Genital Region. Management about Seven Cases at University Hospital of Treichville

Laurent N'dri Kouadio*, Amalado Ayemou, François Xavier Kouadio N'Goran and Germain Koffi Kouadio

Department of Digestive and Proctologic Surgery, University Hospital of Treichville Abidjan, Côte d'Ivoire

***Corresponding Author:** Laurent N'dri Kouadio, Department of Digestive and Proctologic Surgery, University Hospital of Treichville Abidjan, Côte d'Ivoire.

Received: February 13, 2018; **Published:** March 12, 2018

Abstract

Background: Buschke-Lowenstein Tumor is a rare sexually transmitted disease linked to human papillomavirus that affects the ano genital region. Immune defect is a risk factor for malignant transformation. The treatment is not codified although a consensus seems to be emerging for wide surgical excision.

Purpose: To report our experience in the management of Buschke-Lowenstein tumor of the ano genital region.

Patients and Methods: This retrospective study was carried out at University Hospital of Treichville over a period of 9 years, from August 2005 to August 2014.
The epidemiological, diagnostic, therapeutic and evolutionary aspects were studied.

Results: Seven patients with an average age of 44 years were studied with a male predominance (6 men per 1 woman). Multiple partners and HIV infection were recorded in 71.5% (n = 5) with only one case of homosexuality. First line treatment (topical, electrocautery) failed in 3 (43%) cases. The diagnosis was clinical and confirmed by histology. Wide surgical excision followed by seat baths and wound care constituted the essential part of treatment outside one case of abdominoperineal resection due to degeneration after recurrence. Mortality was 14.3% (n = 1). The average healing time was 4,7 weeks.

Conclusion: Buschke-Lowenstein tumor is rare but serious condition because of its degenerative potential. Vaccination and prevention against STDs based on sexual education could help to combat this disease

Keywords: *Condyloma; Buschke-Lowenstein; Wide Excision; Secondary Intention Healing; STDs*

Abbreviations

BLT: Buschke Lowenstein Tumor; HPV: Human Papilloma Virus; M: Male; F: Female; MP: Multiple Partner; STD: Sexually Transmitted Disease

Introduction

Buschke-Lowenstein tumor or giant condyloma acuminata is a rare sexually transmissible disease linked to the human papillomavirus. Its histologic nature is subject of debate. Regarded as benign, BLT can evolve towards intraepithelial neoplasia or squamous cell carcinoma [1]. Condylomas are a frequent reason for examination in dermatology department, particularly in positive HIV patients [2]; they are usually treated by several means (topical therapy, cryotherapy, electrocautery, laser excision…). The treatment is not codified although a consensus seems to be emerging for wide surgical excision in case of BLT. Currently, it is the first-line mean which is recommended in presence of BLT because of its severity due to high rates of recurrence, degeneration and mortality [3]. After surgery, in some cases, the cleanliness of the wound requires special dietary or a fecal diversion by colostomy [3].

We report our experience in the management of 7 cases of BLT affecting ano genital and perianal regions treated by a wide local excision followed by baths of seat and local care.

Patients and Method

Seven cases of BLT with ano genital location were treated from August 2005 to July 2014 in the Digestive and Proctologic Surgical Unit at University Hospital Treichville. Their medical records were reviewed retrospectively. The following parameters were studied: age, sex, sexual behavior, HIV status, clinical aspect and the location of lesions, anoscopy, histology, treatments (previous and our study), outcome (healing, recurrence, mortality and morbidity)

Results

Six men and 1 woman with an average age of 44 years ranged from 21 to 61 years, were concerned. The other results were summarized in tables 1, 2 and 3 apart anoscopy which was negative (no extension of condylomatous lesion to anal canal) at all the patients except patient no 1 who had already histological diagnosis.

Patients	Sex/Age (years)	Sexual behavior	HIV status
1	M/54	MP	Positive
2	M/49	MP	Positive
3	M/46	MP	Positive
4	M/46	MP	Negative
5	M/61	MP	Negative
6	F/32	Widow	Positive
7	M/21	Homosexual (passive sodomy)	Positive

***Table 1**: Sexual behavior and HIV status of patients.*

Patients	Clinical aspects	Histological aspects
1	Painful and itching anal cauliflower-like tumor	Squamous cell carcinoma
2	Itching right perianal cauliflower-like tumor	Condyloma
3	Itching ano perineal cauliflower-like tumor (Figure 1)	Condyloma
4	Itching left perianal vegetative tumor extended to the buttocks	Condyloma
5	Painful and bleeding cauliflower-like tumor in front of anal margin	Condyloma + foci of severe dysplasia
6	Oozing and itching ano genital vegetative tumor extended from the vulva to the tip of the coccyx with painful defecation	Condyloma
7	Ano perineal cauliflower-like tumor extended up to the scrotum with painful defecation	Condyloma

***Table 2**: Clinical and histological aspects of lesions.*

Patients	Previous treatment	Our treatment	Outcome
1	Electrocautery Antiretroviral drugs	Abdominal-perineal resection + pre and postoperative chemotherapy	Perineal recurrence with liver metastases and death at 11 months
2	Antiretroviral drugs	Wide excision + seat baths with antiseptic	Healing at 4 weeks with anal stenosis successfully treated by dilatations without No recurrence at 1 year
3	Electrocautery Antiretroviral drugs	Wide excision (Figure 2) + seat baths with antiseptic	Healing at 4 weeks without No recurrence at 1 year
4	Topical therapy with podophyllum electrocautery	Wide excision + seat baths with antiseptic	Healing at 6 weeks No recurrence at 1 year
5	None	Wide excision + seat baths with antiseptic	Healing at 4 weeks No recurrence at 1 year
6	Antiretroviral drugs	• Wide excision of ano perineal lesions to the coccyx • Electrocautery of vulvar lesions • Seat baths with antiseptic	Healing at 5 weeks without recurrence at 1 year
7	Antiretroviral drugs	Wide excision of perineal and perianal lesions Seat baths with antiseptic	Healing at 5 weeks No recurrence at 1 year

***Table 3**: Previous treatment, our treatment and outcome.*

Figure 1: *Ano perineal cauliflower like tumor (patient no 3).*

Figure 2: *Post-operative view after large excision (patient no 3).*

Discussion

BLT is a rare disease in the literature [4-8], whereas HPV infections are the most common STDs in the world [9]. This contrast can be explained by the fact that any contamination does not cause to the appearance of lesions; Most of these infections spontaneously disappear in two years after contamination [9]. This rarity was confirmed by our study with an annual frequency of less than 1 case.

In our study, BLT predominantly affected a sexually active male population having multiple sexual partners and HIV positive in 71.5% (n = 5). Anoreceptive intercourse was only recorded in 14.3% (n = 1). All these risk factors are recognized by several authors [1-2,5].

The diagnosis of BLT was made on clinical examination in all cases and confirmed by histology. Anoscopy, which did not reveal an intraduct location, is recommended in patients with ano-genital warts, especially in anoreceptive intercourse [5-6,9].

Since HIV infection is a risk factor for rapid growth and malignant transformation of condylomas [4], its serology was systematic in our study. Screening for other STDs (syphilis, hepatitis B and C) was not performed while admitted in the literature [4-5,9]; it makes it possible not to take the risk of disregarding another STD whose treatment often has the advantage of decreasing the maceration and the volume of the condylomas [9].

Treatment aims to eliminate external condylomatous lesions. With regard to BLT, wide surgical excision is the method we used; it has the advantage of obtaining healthy resection margins and analysis of the entire room with the search for foci of degeneration [3,5,10]. In one case (patient no 6), we used electrocautery of vulvar lesions in addition to the excision. Healing by secondary intention was used in all of our patients with an average delay of 4,7 weeks; it is a simple method adapted to the perineum whose cleanliness has been ensured by baths of seat without colostomy. In the absence of colostomy, some authors associate a diet with no residues and a slowing down of the intestinal transit to reduce fecal contamination [7]. In case of extensive excision, reaching the anal margin, complementary plastic gestures (thin skin graft or flap of rotation) are necessary to shorten the healing time and reduce the risk of anal stenosis [7]. The anal stenosis observed in patient no 2 was resolved by dilatations; In case of failure, anoplasty could be used.

BLT is considered by some authors [8-11] as an intermediate form between an ordinary condyloma acuminata and squamous cell carcinoma; it presents a risk of malignant degeneration of 30 to 56% within an average period of 5 years [10,12]. Electrocautery used as the first intention in patient no 1, has certainly left in place lesions that have evolved towards squamous cell carcinoma. In case of malignant transformation, chemo radiotherapy may be used as neoadjuvant therapy before abdominoperineal resection; sometimes this modality producing complete tumor regression may obviate the need of surgery [11]. There is no consensus about the use of oncologic treatment in BLT. Some authors [11,13] noted that radio or chemotherapy could be useful to reduce the tumor before surgery. However there is no sufficient data available to recommend them because of their limitations and adverse effects [14]. Furthermore, radiotherapy has been suspected in malignant transformation of BLT [11]. The wide excision was sufficient to treat all the other patients in whom the histological examination of the surgical specimens revealed foci of severe dysplasia in patient no 5.

No recurrences were reported at one year in our study. Clinical control is necessary at 3 and 6 months after the disappearance of the clinical lesions and the follow up must be at least one year [9]. In our study the follow up was possible on one year. HIV positive patients should require a longer follow up because of this risk factor.

Prevention is justified in view of the difficulties due to the failure of first line treatment and the possibility of malignant transformation. Nowadays, more than body hygiene and sex education, HPV vaccination is aimed at adolescents of both sexes before the onset of their sexual activity [15]; it is a quadrivalent vaccine protecting against 16 and 18 oncogenic HPVs as well as the two genotypes 6 and 11 most commonly responsible for ano genital condylomas [9,15].

Conclusion

BLT is a rare but serious condition because of its degenerative potential. In our practice, it has reached a predominantly male population with multiple partners and HIV positive. The wide excision with healing by secondary intention gave us local control in short term. Screening and treatment of other STDs should be systematic. The treatment of BLT is still not codified. Thus the extension of vaccination and STDs prevention measures could help to combat this disease.

Bibliography

1. Faye O., *et al*. "Condylomes génitaux: étude de 149 cas". *Annales de Dermatologie et de Vénéréologie* 140.S1 (2013): S82.

2. Kassi K., *et al*. "Condylomes anogénitaux profus et néoplasie chez une femme infectée par le VIH". *Médecine d'Afrique Noire* 58.6 (2011) : 298-300.

3. Sandhu R., *et al*. "A gigantic anogenital lesion: Buschke-Löwenstein Tumor". *Case Reports in Dermatological* Medicine (2014).

4. Correia E., *et al*. "Buschke-Löwenstein Tumour: successful treatment with minimally invasive techniques". *Case Reports in Dermatological Medicine* (2015).

5. El Mejjad A., *et al*. "Le condylome acuminé géant - Tumeur de Buschke Löwenstein (à propos de 3 cas)". *Progrès en Urologie* 13 (2003): 513-517.

6. Gole GN., *et al*. "Successful treatment of Buschke–Löwenstein Tumour by surgical excision alone". *Journal of Cutaneous Aesthetic Surgery* 3.3 (2010): 174-176.

7. Mingolla GP., *et al*. "Reconstructive surgery in anal giant condyloma: Report of two cases". *International Journal of Surgery Case Reports* 4.12 (2013): 1088-1090.

8. Renzi A., *et al*. "Buschke-Löwenstein Tumor successful treatment by surgical excision alone: a case report". *Surgical Innovation* 13.1 (2006): 69-72.

9. Bouscarat F., *et al*. "Verrues génitales (condylomes) externs". *Annales de Dermatologie et de Vénéréologie* 143 (2016): 741-745.

10. Indinnimeo M., *et al*. "Buschke-Löwenstein tumor with squamous cell carcinoma treated with chemo-radiation therapy and local surgical excision: report of three cases". *World Journal of Surgical Oncology* 11 (2013): 231.

11. Papiu HS., *et al*. "Perianal giant condyloma acuminatum (Buschke-Löwenstein tumor). Case report and review of the literature". *Chirurgia* 106.4 (2011): 535-539.

12. Dauendorffer JN., *et al*. "La tumeur de Buschke-Löwenstein péno-scrotale". *Annales de Dermatologie et de Vénéréologie* 143.11 (2016): 796-798.

13. Njoumi N., *et al*. "La tumeur de Buschke-Löwenstein anorectale : à propos de 16 cas et revue de la littérature". *Pan African Medical Journal* 16 (2013): 131.

14. Skowronska-Piekarska U., *et al*. "Buschke - Löewenstein tumor resection with simultaneous reconstruction of extensive tissue losses: case report". *BioMed Central Surgery* 15 (2015): 41.

15. Senéjoux A., *et al*. "Traitement des condylomes anaux". *La Lettre de l'Hépato-gastroenterologue* 14.3 (2011): 134-137.

Volume 5 Issue 4 April 2018