BUSCHKE-LÖWENSTEIN DISEASE – CASE REPORT

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Keywords: perianal warts, disease Buschke-Löwenstein Abstract: Buschke-Löwenstein disease is represented by the appearance of perianal warts, untreated, with long evolution that turn into Verrucous carcinoma tumour in the perianal region, especially in immunosuppressed men. We present a 68-year old patient, in whom symptoms onset occurred 10 years ago. The disease was ignored by the patient during this period of time. The patient, without a history of other pathology, was hospitalized in our clinic presenting a giant tumour located in the perianal region, on the right buttock. At the moment of the consultation, the tumour size reached 28 cm in diameter with a depth of 5-6 cm invasion. We practiced total excision of the tumour, with favourable evolution. The patient with Buschke-Lowenstein disease must be very carefully clinically and imagistically investigated in order to detect the tumour visceral invasion and to establish the extension of the surgical procedure. We discussed therapy and literature.

INTRODUCTION

Giant condyloma acuminatum is characterized by the development and slow progression of exophytic, ulcerative and cauliflower-shaped tumours that infiltrate in the adjacent tissue.(1)

It was first described in 1925 by Abraham Buschke and Ludwig Löwenstein, known as Buschke- Löwenstein tumor (BLT), which is a rare sexually transmitted disease. In 1979, Mohs and Sahl included this disease into the verrucous carcinoma category. Men are most affected with a ratio of 3:1, but there are also cases described in the literature in women or children. The most affected region is the anogenital area, but very seldom, urinary bladder and urethral area can also be affected in patients with immunodeficiency.(2)

CASE REPORT

We present a 68-year old patient from urban background with A+ blood type, without any previous transfusions and with no known allergies, who was admitted in our clinic with a tumoral formation localized in the perianal region, predominantly on the right buttock with a diameter of 20 cm/15 cm, cauliflower-shaped with irregular contour and endured consistency, adherent to the underlying plans, with a growth rate of 10 years (figure no. 1).

Figure no. 1. Perianal condylomatosis



The patient also presented pain during defecation, localized in the same area, without any irradiation, continuous, described by the patient as a burning sensation without any associated phenomena. The patient did not have any family history regarding the tumour, as well as no other pathologies.

Laboratory analyses revealed a mild anemia, with change in hemoglobin value of 12.9g/dl and serum iron (40.8ug/dl); mild neutrophilic leukocytosis and thrombocytosis with an increase in fibrin level (599.8 ml/dl) and a 0.5 second-increase of prothrombin time.

Furthermore, a surgical intervention was performed involving in a first step the tumour excision, that represents the "gold-standard" therapy of Buschke-Löwenstein tumour (figure no. 2).

Figure no. 2. Tumor after excision



The postoperative evolution was favourable with formation of granulation tissue.

Usually, surgical re-interventions are often necessary to complete the initial resection up to tumour-free margins. Fortunately, in our case there was no need for a surgical reintervention and we could continue with the reconstructive surgery consisted of a skin grafting (figure no. 3).

¹Corresponding author: Ciprian Tănăsescu, Str. Triajului, Nr. 59, Şelimbăr, România, E-mail: tanasescuciprian@yahoo.fr, Phone: +40722 490048 Article received on10.08.2016 and accepted for publication on 19.09.2016 ACTA MEDICA TRANSILVANICA September 2016;21(3):64-65 A split-thickness skin graft was performed after 3 weeks using a thin layer with a diameter of 15 cm/10cm and elliptical shape, removed from posterior right thigh (figure no. 4).

Figure no. 3. Split-thickness skin graft



Figure no. 4. 4 weeks after transplantation



DISCUSSIONS

Buschke-Löwenstein tumour is classified as a verrucous carcinoma. It was designated as a variant of squamous cell carcinoma with distinct features including welldifferentiated, slow locally invasive growth and verrucous appearance. Although, as initially described, the oral cavity is the most common site, it has become evident that similar lesions can also be recognized in the skin, upper aerodigestive tract, and anogenital sites.(3)

It has been demonstrated that papillomaviruses are ethyological factors of crucial importance in appearance and progression of epithelial neoplastic lesions. In spite of their heterogenity and polymorphism, these causal agents are able to infect epithelial sites of the species. In case of humans, they may provoke abortive infections, usually with no clinical expression. In case of concomitant infections, papilomaviruses may lead to neoplasia with high risk of malignant transformation.

Papillomaviruses affect exclusively epithelia, using identical mechanisms of invasion, differences being represented by the ability of the viral genome multiplication that depends on cellular microenvironment, immune response of the host and proliferative potential of the infected epithelium.(4)

In our case, we had 2 dilemmas. The first one raised

the question if we proceed to the skin graft at the same time with the tumour resection or a re-intervention only for it. Because of the high risk of infection while performing the tumour resection, we chose to resect the tumour on the first step, then we sterilized the region. The skin graft plasty was successfully performed three weeks later.

The resection region was in full contact with the anus, which supposed a high risk of infecting the skin graft. We had two options. Either to deviate the bowel transit through a left iliac anus then to proceed with the skin graft, or to fully emptying the bowel and to subdue the patient to parenteral nutrition and hydrous regime. The patient's decision was to take the second option, which was very efficiency.

CONCLUSIONS

The neglected perianal condylomatosis can turn into verrucous carcinoma. In cases with suprainfected Buschke-Löwenstein tumours that need skin graft transplant, the best choice is to perform the intervention in two steps.

An efficient prophylactic way for the suprainfected perianal wounds can consist in the association of the hydrous regime with parenteral nutrition.

REFERENCES

- Spînu D, Rãdulescu A, Bratu O, Checheriă IA, Ranetti AE, Mischianu D. Giant Condyloma Acuminatum – Buschke-Löwenstein Disease – a Literature Review. Chirutgia. 2014;109(4):445-450.
- Wiedemann A, Diekmann WP, Holtmann G, Kracht H. Report of a case with giant condyloma (Buschke-Löwenstein tumor) localized in the bladder. J Urol. 1995;153(4):1222-4.
- Martin JM, Molina I, Monteagudo C, Marti N, Lopez V, Jorda E. Buschke Lowenstein tumor. J Dermatol Case Rep. 2008 Dec 27;2(4):60-62.
- Analele Științifice ale USMF "N. Testemițanu"-Numărul 1(13) / 2012 / ISSN 1857-1719.
- Boisnic S, Thomas A, et al. Carcinome verruqueux et lichen plan bucal. Association ou coincidanceã Rev. Ann Dermatol Venereol. 2003;12:1196.
- Bucur Gh, Opriş DA. Boli Dermatovenerice, Enciclopedie Ed. Medicală Națională, Bucureşti; 2002. p. 160-1.
- 7. Dimitrescu A, Trifu P. Precancere și cancere cutanate vol. I Ed. Medicală, București; 1992. p. 51-7.
- Chao MW, Gibbs P. Squamous cell carcinoma arising in a giant condyloma acuminatum (Buschke -Lowenstein tumour) Asian J Surg. 2005 Jul;28(3):238-40.
- Tytherleigh MG, Birtle AJ, Cohen CE, GlynneJones R, Livingstone J, Gilbert J. Combinated surgery and chemoradiation as a treatment for the Buschke -Lowenstein tumour Surgeon. 2006 Dec;4(6):378-83.
- Ambiz-Gonzalez G, Escobedo-Zavala LC, Carrillo de la Mora and col. Buschke - Lowenstein tumor in childhood: a case report J Pediatr Surg. 2005 Sep;40(9):e25-7.