Bilateral inguinoscrotal Buschke-Löwemstein disease – a case report

D. Spînu[1], A. Rădulescu[1], C. Iatagan[1], R.Popescu[1], V. Mădan[1],
O. Bratu[1], A. E. Ranetti[2], D. Mischianu[1]

[1] *Urology clinic, Central Military Emergency University Hospital "Dr. Carol Davila", Bucharest, Romania*

[2] *Endocrinology ward, Central Military Emergency University Hospital "Dr. Carol Davila", Bucharest, Romania*

Abstract

Introduction. Buschke-Löwenstein's disease or giant condylomatosis is caused by HPV (human papiloma virus). It is characterized by the development of giant cauliflower like genitor-anal tumors. These tumors are considered by some authors as benign and by others as a verrucous carcinoma.

Materials and methods. We present the case of 49 years old man, with bilateral inguinoscrotal tumors, neglected for about 10 years, the surgical management and therapeutic options.

Conclusions. Buschke-Löwenstein's condylomatosis is a rare disease which requires extensive surgery. The genitoanal area, the anatomical site of the tumors, has a great psychological importance for the patient. The risk of malignancy and recurrence is also to be considered.

Key words: Buschke-Löwenstein; giant condylomatosis; surgical management

Correspondence: Dr. A.E.Ranetti
Central Military Emergency University Hospital "Dr. Carol Davila"
Mircea Vulc?nescu street no 88; Bucharest
e-mail: ranetti@gmail.com

Introduction

Buschke-Löwenstein disease or giant condylomatosis is caused by human papiloma virus so it can be linked with the patient's sexual behavior. [1]

Some authors consider the disease as being benign (large condyloma acuminata) while other consider the disease to be a verrucous carcinoma, a low-metastatic risk subgroup of squamous-cell carcinoma. For many years the condition has been considered as being border-line with a difficult histopathological differential diagnosis.[2],[3]

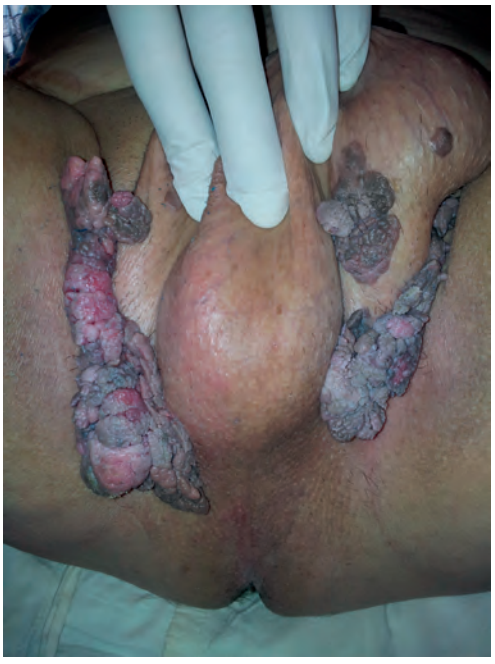
Clinically giant, slowly growing, necrositing, cauliflower-like inguinoscrotal tumors develop. Septic complications are not rare[4]. Besides the risk of malignancy the tumors tend to infiltrate adjacent tissue.[2]

The first medical exam is delayed by the patient due to psychological reasons; causing large, complicated tumors to evolve that require often mutilating extensive surgery.

Case report

49 years old I.M., single, living in urban environment, with high school education is admitted in our urological ward for giant bilateral inguinoscrotal tumors.

Affirmatively the disease evolved for 10 years, the patient not undertaking any medical exam before. The patient affirmed social smoking and moderate alcohol intake.Biochemical work at presentation showed 8800 leucocytes/mm^3 with no other significant data.



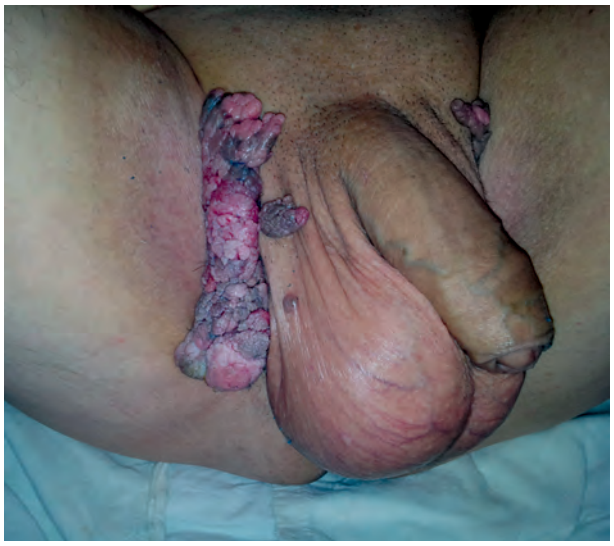
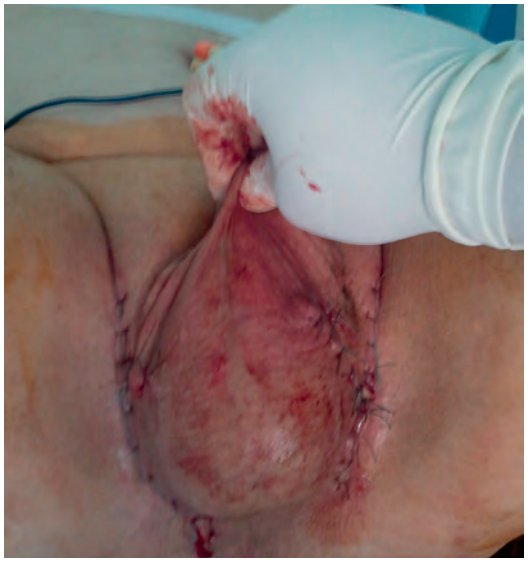


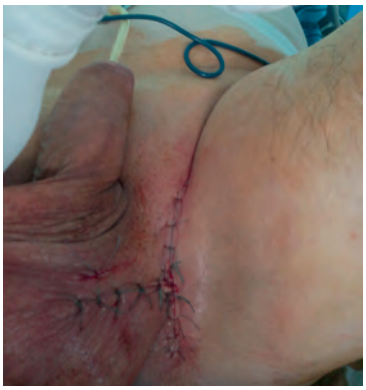
Fig. 1, 2: Preoperative aspect, multiple bilateral inguinoscrotal tumors with exophytic growth pattern

The patient undergoes surgery, under spinal anesthesia; extensive excision up to macroscopic unaffected subcutaneous tissue was performed. Tissue was sent for histopathological exam and secretion sent to the bacteriology lab for culture. Suturing of the margins was performed in a simple manner, skin grafts were not needed.

Postoperative evolution was influenced by intense suppuration and wound dehiscence.

Bacteriological exam showed group B beta hemolytic streptococcus with wide antibiotic sensibility. The patient started antibiotic treatment. Surgical reintervention was performe with good wound healing.





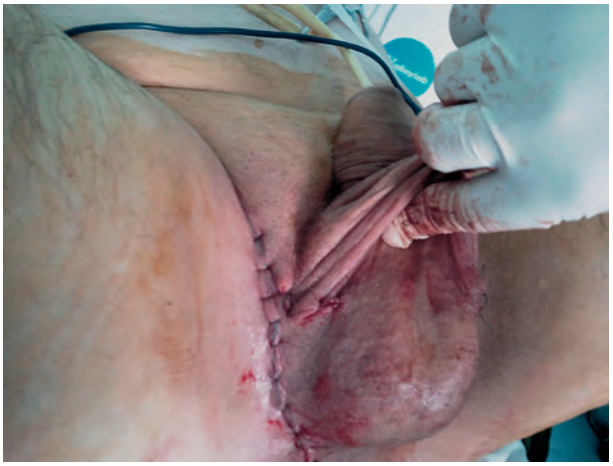


Fig. 3, 4, 5: Postoperative aspect showing the inguinoscrotal suture

Histopathological report on the right side lesion showed giant condyloma acuminatum, Buschke-Löwenstein type, with areas that suggest verrucous carcinoma transformation. The report on the left side tumor showed benign giant condyloma acuminatum Busckhe-Löwenstein type.

The patient outbounds our clinic with surgical wounds healing and recommendation to perform oncologic and radiotherapeutic evaluation.

Discussions

Although a rare disease Buschke-Löwenstein condylomatosis requires extensive surgical treatment on an anatomical area with high psychological impact and careful oncologic surveillance. [5]

Early diagnosis and rapid treatment of septic complications is of utmost importance otherwise it could jeopardize the surgical effort and the patient's outcome.

The anatomic areas where the tumors are located make the surgical approach more difficult. Intense tissue traction causes the suture to sustain important tension that leads to wound dehiscence (as happened to our patient too). Often the surgical team needs a plastic surgeon.

The high recurrence rates, more than 50% [6] after some authors, call for a close follow-up, usually difficult to maintain.

Positive sides are the low metastatic risk rate and the slow development of the tumors.

Minimally and non invasive treatment options, like cryoablation, carbon dioxide lasers, Mohs chemosurgery, are in an incipient state and have controversial results. Systemic chemotherapy with 5 fluorouracil and imiquimod and immunotherapy with interferon have also been tried [7].

These methods still remain at a research state and are of use only for small scale lesions or critically ill patients, leaving surgery as the sole real treatment option. The small incidence rate makes it difficult to develop a standardized treatment protocol.

Radiotherapy is avoided due to cellular mutations that can lead to anaplastic transformation of the tumor.

In conclusion, surgical approach, with wide tissue excision, remains the only real option for these patients.[7]

Acknowledgement

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References

1. E.Brignole, P.C. Meinero, C.Lapini et al: *Neoplastic Transformation of Anal Condyloma.* Coloproctology. 1997 vol 19 pp 111-113
2. H.S. Papiu, A.Dumnici, T.Olariu et al.: *Perianal gigant condyloma acuminatum (Buscke-Löwenstein tumor). Case report and review of the literature.* Chirurgia. 2011 nr.4 pp 535-539
3. V.R. Yanofsky, S.Mercer, R.G. Phelps *Journal of Skin Cancer. Histopatological Variants of Cutaneos Squamos Cell Carcinoma: A Review 2011*, vol 2011 pp 1-13
4. N.Klein, K. Jasch, J. Kimmritz et al. *Dermatology,* 2007, 215, pp 264-265
5. M.Shabbir, S.Minhas, A.Muneer. *Diagnosos and Management of Premalignant Penile Lesions. 2011.* Ther Adv Urol 2011,3, pp 151-158
6. L.J. Trombetta, R.J. Place: *Giant condyloma acuminatum of the anorectum: trends in epidemiology and management: report of a case and review of the literature.* Dis Colon Rectum 2001; 44: 1878–1886
7. J. M. Martin, I. Molina, C. Monteagudo et al. *Buschke-Löwestein tumor.* J Dermatol Case Rep, 2008, 4, pp 60-62.