BUSCHKE LOWENSTEIN TUMOUR OF GLANS PENIS RESPONSE TO TOPICAL 5% IMIQUIMOD CREAM
Anila Sunandini¹, M. Parvathi², S. Jhansi Lalshmi³, Brahma⁴, Ajay Kumar Gummalla⁵

INTRODUCTION: Buschke-Löwenstein tumour (BLT), also known as Giant condyloma acuminatum (GCA), is a very rare, sexually transmitted disease that affects the ano-genital region.¹⁻³ BLT is a slow growing cauliflower-like tumour, but unlike simple condyloma, it is locally aggressive and destructive.⁴ Human papilloma virus (HPV) has been identified as an important contributory factor in the development of tumour. We are reporting a case of Buschke–Loewenstein tumour, successfully treated with topical 5% imiquimod cream.

CASE REPORT: A 31 year old unmarried, uncircumcised male patient presented to skin OPD with complaints of cauliflower like growth on glans penis. Growth started as a small papule on the corona sulcus at 12 O'clock position 2 months ago, gradually increased in size involving upper 2/3rd of the glans penis. There is no history of dysuria and difficulty in micturition. Patient gives history of unprotected sexual intercourse with known female. On examination irregular well defined growth, was present over the glans penis with Areas of necrosis, crusting and fissuring. On palpation the mass was soft in consistency, non-tender and there is no bleeding on touch. (Fig. 1–4). No lymphadenopathy

Laboratory tests revealed normal liver and kidney functions test. Serology for Hepatitis B, Hepatitis C, HIV and syphilis were nonreactive.

Biopsy from the growth for Histopathological examination is suggestive of Giant Condyloma Accuminata/Buschke–Loewenstein tumour, no evidence of malignancy.

We opted for Topical imiquimod cream because is of young age, unmarried, and not willing for surgery. Significant results were obtained after 4 weeks treatment. Patient was followed for a period of 6 months. There was no relapse of the BLT tumour up to 6 months.

DISCUSSION: BLT was first described by Buschke and Lowenstein in 1925.¹² They observed a penile lesion that clinically resembled both common condyloma acuminata (venereal warts) and squamous cell carcinoma, but differing from both of them regarding the biological¹ behaviour and the histopathological appearance. They described it as ‘cauliflower-like growth usually localized to the glans penis’ and considered it to be a low-grade, well-differentiated carcinoma³ displaying a marked
tendency to compress and displace deeper tissue HPV type 6 (HPV 6) or HPV 11 can be detected in over 90% of these lesions.[5,6] A high incidence of GCA has been reported in the homo and bisexual populations and recurrent aggressive GCA has been reported in HIV positive patients.

Buschke–Loewenstein tumours were ulcerated, fungating masses, and the characteristic histological pattern was showing both endophytic and exophytic growth with undulating papillomatosis of densely keratinized, well-differentiated squamous epithelium.[5,6] CT scans can be used to demonstrate the exact location and extent of BLTs[5,6,7]

In our case patient is young unmarried, un circumscised with cauliflower like fungating mass with areas of necrosis and fissuring. This is concurrence with previous reported cases.[5]

Treatment of GCA can be classified into three types: topical therapy (e.g., using podophyllin, fluorouracil, or radiotherapy), tumour removal (e.g., by cryotherapy using liquid nitrogen, CO₂ laser therapy, electrocautery, or surgical excision), and immunotherapy (e.g., using imiquimod).[4,8] However, no gold standard treatment currently exists for treating this rare disease, and the choice of treatment depends largely on the physician’s experience and skills.

In view of young age unmarried, not willing for surgery we opted for topical imiquimod thrice weekly, the lesion responded satisfactorily. Recent reports in literature correlates with our study.[4,8]

CONCLUSION: 5% imiquimod (IMIQUAD) cream could be considered an effective therapy in the treatment of GCA if the patient not willing for surgery.

REFERENCES:
1. Steffen C. The men behind the eponym – Abraham Buschke and Ludwig Lowenstein: giant condyloma (Buschke–Loewenstein) Am J Dermatopathol.2006; 28(December (6)): 526–536. [PubMed].
2. Loewenstein L. W. Carcinoma-like condylomata acuminate of the penis. Med Clin N Am. 1939; 23: 789–795.
3. Miranda Aranzubía O., García Rodríguez J., González Alvarez R.C., Alvarez Mújica M., Rodríguez Robles L., Regadera Sejas J. Giant condyloma acuminatum (Buschke–Löwenstein tumor) Actas Urol Esp.2008; 32(9): 951. [PubMed].
4. Topical imiquimod: a review of its use in genital warts. Perry CM1, Lamb HM. Author information1 Adis International Limited, Auckland, New Zealand. demail@adis.co.nz. [PubMed].
5. Braga J. C., Nadal S. R., Stiepcich M., Framil V. M., Muller H. Buschke–Loewenstein tumor: identification of HPV type 6 and 11. An Bras Dermatol.2012; 87 (January–February (1)): 131–134. [PubMed].
6. Chu Q. D., Vezeridis M. P., Libbey N. P., Wanebo H.J. Giant condyloma acuminatum (Buschke–Lowenstein tumor) of the anorectal and perianal regions. Analysis of 42 cases. Dis Colon Rectum.1994; 37: 950–957. [PubMed].
7. Balazs M. Buschke–Loewenstein tumour: a histologic and ultra-structural study of six cases. Virchows Arch A. 1986; 410: 83–92. [PubMed].
8. Department internal medicine, carolinas medical centre USA Tyring. Compared safety and effectiveness of 5% imiquimod cream in treatment of external genital warts [PubMed].
Fig. 3

Histopathology showing hyperkeratosis, papillomatosis and acanthosis of squamous epithelium.

Fig. 4

After treatment.
### CASE REPORT

**AUTHORS:**
1. Anila Sunandini
2. M. Parvathi
3. S. Jhansi Lalshmi
4. Brahma
5. Ajay Kumar Gummalla

**PARTICULARS OF CONTRIBUTORS:**
1. Professor & HOD, Department of Dermatology, Andhra Medical College, Vizag.
2. Assistant Professor, Department of Dermatology, Andhra Medical College, Vizag.
3. Assistant Professor, Department of Dermatology, Andhra Medical College, Vizag.
4. Assistant Professor, Department of Dermatology, Andhra Medical College, Vizag.
5. Junior resident, Department of Dermatology, Andhra Medical College, Vizag.

**FINANCIAL OR OTHER COMPETING INTERESTS:** None

**NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:**
Dr. P. Anila Sunandini,  
Professor & HOD,  
Department of DVL,  
Andhra Medical College,  
Vizag, Andhra Pradesh.  
E-mail: gppatnala@yahoo.co.in

- Date of Submission: 08/01/2015.
- Date of Peer Review: 09/01/2015.
- Date of Acceptance: 17/02/2015.
- Date of Publishing: 26/02/2015.