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BUSCHKE LOWENSTEIN – THE RARE, SINISTER LOOKING, LOW MALIGNANT RISK TUMOUR – A CASE REPORT

Dermatology

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ABSTRACT

Bushke Lowenstein Tumour or Giant Condyloma Acuminata is a seldom seen manifestation of Human Papilloma virus types 6 and 11. The incidence is about 0.5% in the general population. Although the malignant risk is low, it warrants timely removal and management. The treatment varies from topical Imiquimod to Cryotherapy to Wide local excision. Prompt and early treatment needs to be instituted to avoid bothersome effects and to hamper the malignant progression [55-60%]. In view of high recurrence rates [65-70%], regular surveillance is mandatory. We are presenting this case to reiterate the rarity and low malignant risk, in contrary to the ominous presentation, and to highlight the importance of timely identification and management.

KEYWORDS

Buschke Lowenstein Tumour, Giant Condyloma Acuminata, HPV 6,11, Low malignant risk

INTRODUCTION :

Buschke Lowenstein Tumour (BLT) - also known as Giant Condyloma Acuminata – is a type of Verrucous Carcinoma involving the Anogenital area. It is a well differentiated type of Squamous Cell Carcinoma, with limited propensity for metastasis and high recurrence rates. The causative organism of this locally aggressive and infiltrative tumour is Human Papilloma Virus – Types 6 and 11. The gross appearance is that of a bulky tumor suggesting an aggressive behavior, whereas histopathology reveals a relatively low-grade malignancy. [1-3]

Case Report :

A 57 year old immunocompetent male presented with a slow growing mass over the penis and lower abdomen for the past 10 years, with ulcer and foul smelling discharge for the past 6 months. There is history of sexual promiscuity and chronic weight loss. There is no history of gastrointestinal disturbance or change in bowel movements.

Dermatological examination showed an irregular, friable, cauliflower like fungating mass about 12x10 cms in the largest dimension over the scrotum, penile shaft and bilateral inguinal region(Figure 1). An ill defined ulcer, about 3x2x1 cm present over the right side of scrotum with a sloughy base, not fixed to the underlying tissues.(Figure 2) No warmth. Mild tenderness present. No inguinal lymphadenopathy.

Baseline investigations were normal and the viral markers were non reactive. Skin biopsy showed high grade dysplasia with Acanthosis, Papillomatosis and koilocytes confirming the diagnosis of BLT (Figure 3,4). Wide local excision of the tumour with perineal urethrostomy and Split skin graft from Left thigh was done by Surgeons.

DISCUSSION :

The term BLT was christened by Buschke and Lowenstein, in 1925 [4] , when they witnessed a penile lesion which bore clinical semblance to Condyloma acuminata and Squamous Cell Carcinoma, but differing from both in terms of behaviour and histology [5]. They postulated it as a low-grade, well-differentiated carcinoma displaying a marked tendency to compress and displace deeper tissues, showing a "cauliflower-like" growth usually localized to the glans penis [4].

Bisexual and homosexual populations exhibit high incidence of BLT, while recurrent aggressive GCA has been reported in HIV positive patients[9] . HPV types 6 and 11 can be detected in over 90% of these lesions, establishing the causative role of HPV[10]. In vitro infection of human cervical tissue explants with these HPV types, elicited a histological picture typical for genital warts.

These tumours appear as ulcerated, fungating masses with histology showing both endophytic and exophytic growth with undulating papillomatosis of densely keratinized, well-differentiated squamous epithelium[7].CT scans can be used to spot the exact location and extent of BLTs[8] .

BLT differs from other condylomas in the aspect that it " displaces or pushes " rather than " infiltrating" the underlying tissues[6].

Treatment can be broadly classified into three types: Topical therapy- like Podophyllin, 5-fluorouracil, Imiquimod or radiotherapy, Physical modalities - like Cryotherapy using liquid nitrogen, CO_2 laser therapy, Electrocautery, Surgical excision, and Immunotherapy - like Intralesional MMR, BCG, Candida [11-13] .There is however no gold standard modality, with the treatment being individualised for each case.

Podophyllin, though a useful topical remedy for ordinary Condyloma Acuminata, has repeatedly proved ineffective for treating Buschke–Lowenstein Tumour[14].Such lesions, instead, are often being subjected to Electrocoagulation or Surgical excision. In this patient, the lesion was excised surgically and followed with Perineal urethrostomy and Split skin grafting.

The majority of authors agree that surgery is the treatment of choice and is effective especially in the early stages of the disease. Wide local excision remains the mainstay of therapy, that can be followed, if it is necessary, by delayed split thickness skin grafts[15,16,17,18].

CONCLUSION:

Buschke Lowenstein Tumour, though bears a low malignant risk, has a significant psychological impact resulting in diminished quality of life of the patient. Timely assessment, prompt diagnosis supported by histopatholgy and appropriate management measures should be instituted. This disease again reiterates the importance of safe sexual practices, in this age of widespread promiscuity.

ACKNOWLEDGMENTS
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Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for images and other clinical information to be reported in the journal. The patient understands that names and initials will not be published and due efforts will be made to conceal patient identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

Image Legends:
Figure 1 : Shows the friable, cauliflower like growth over the genital area

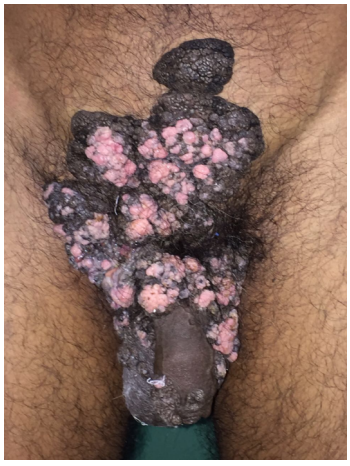


Figure 2: Shows the ulcer over the right side of scrotum with a sloughy base

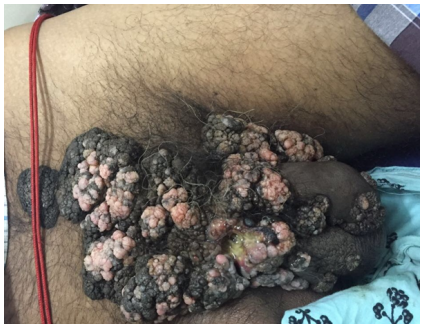
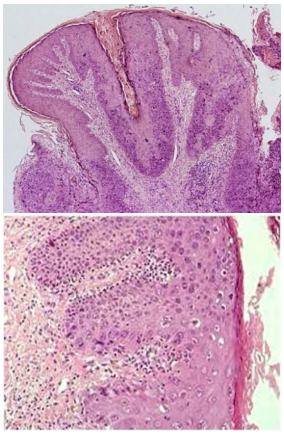


Figure 3 & 4: Represents the histological findings – Acanthosis, Papillomatosis and Koilocytes



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