

PERIANAL BUSCHKE - LOWENSTEIN TUMOR : REPORT OF A CASE

Pınar ÖZTAŞ, M.D.,

Arzu EREL, M.D.,

Cem SEZER*, M.D.

Gazi University, Faculty of Medicine, Departments of Dermatology and Pathology*, Ankara-Turkey
Gazi Medical Journal 2001; 12: 141-143

ABSTRACT: *Buschke - Lowenstein tumor (BLT) is a tumoral lesion seen especially on the penis in uncircumcised men. Infiltration and penetration of the tumor are characteristic features producing fistulae and sinuses. In this case report, we present a BLT in a 2.5-year - old girl in the perianal region.*

Key Words: *Childhood, Giant Condyloma Accuminatum, Perianal Region.*

INTRODUCTION

Buschke Lowenstein Tumor (synonym: giant condyloma accuminatum (1), BLT) is a slow growing, sometimes painful, cauliflower-like mass. It usually begins as a warty growth on or around the prepuce and gradually becomes nodular (2). Primary location of BLT is the external genitalia. BLT is generally observed in males, usually on the penis, and rarely occurs in females (3). The affected men have been reported to be uncircumcised and between the ages of 18 and 86 (4).

CASE REPORT

A 2.5-year-old-girl had a mass in her perianal region. Her family stated that a progressively enlarging mass had been present for one year. She had had a rectal examination without a surgical glove by a nurse to provoke defecation 1.5 years ago. No history of sexual abuse existed. Dermatological examination revealed a 5 cm sharp edged, verrucous, brownish tumor with oozing and fissures and located around her anus

(Fig. 1). Systemic examination findings were normal. Several multibiopsy samplings were made; thickened stratum corneum was detected and marked papillomatosis and acanthosis with specific perinuclear vacuolization in both superficial and deep parts of the epidermis causing koilocytosis were seen. The tumor base did not show any cellular atypia and there was no evidence of invasion or tissue destruction (Fig. 2). Immunohistochemical study showed no evidence of Human Papilloma Virus (HPV) (For anti HPV antibody, DAKO N 1547, CA, USA, for anti HPV 16 antibody-2 (Clone CAMVIR-1) Neomarkers, CA, USA). Erythrocyte sedimentation rate, complete blood count, liver and kidney functions, blood sugar and electrolytes, blood lipids, urine analysis, PPD test, immunoglobulines, and complement levels were normal. BLT was diagnosed clinically and histopathologically. A surgical excision was made and local relapse was seen in the first month. Additional cryotherapy was applied. She is still being followed by our department.



Fig. 1: Clinical presentation of the patient.

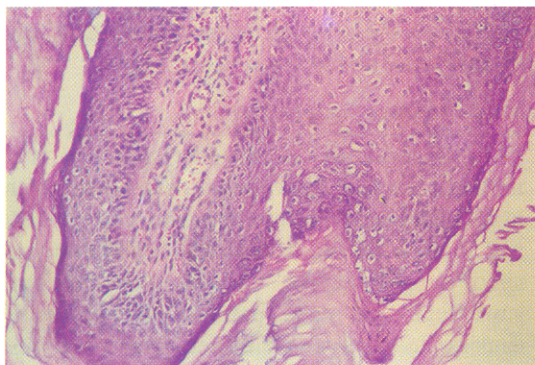


Fig. 2: Koilocytic epithelial cells under the surface hyperkeratosis (original magnification; Hematoxylin Eosin x10).

DISCUSSION

BLT is a type of condyloma arising on the genitalia, which enlarges and leads to a cauliflower-like appearance. The surface is hard and the lesion is commonly seen in the perianal area or groin, which may also affect the coronal sulcus, especially in uncircumcised men. It is now generally accepted that almost all cases are transmitted sexually. However, there may be some exceptions. Transmission or re-infection from infected underwear or sharing a bath with

an infected adult appear to be alternative transmission modes (1, 5). In our case, a rectal examination without a surgical glove for bowel discharge was the suspected route of transmission.

In BLT, histopathologically, the stratum corneum is thickened. Lesions located on mucosal surfaces may show parakeratosis. The stratum malpighii shows papillomatosis and considerable acanthosis, with thickening and elongation of the rete ridges. Mitotic figures may be present. The most distinctive feature, important for the diagnosis, is the presence of areas in which the epithelial cells show distinct perinuclear vacuolization causing koilocytosis. Koilocytotic nuclei, double nuclei, and apoptotic keratinocytes may be present (6). In our case, the histopathological section showed hyperkeratosis, papillomatosis and koilocytosis. Since endophytic and destructive proliferations with cytological criteria of malignancy were absent, we did not consider our patient's lesion to be a verrucous carcinoma which is a low grade, tissue destructive, malignant neoplasm (7). It is commonly known that HPV plays a role in the pathogenesis of giant condyloma acuminata (5). In our case, the immunohistochemical study showed no evidence of HPV. Due to lack of technical facilities we could not perform PCR examination and in-situ hybridization. It is known that the success of immunohistochemical studies is lower than that of PCR and in-situ hybridization. Finding a negative result does not exclude HPV infection (8).

The main differential diagnosis of BLT must be made between syphilitic condylomas which are sessile clinically and seropositive for VDRL and TPHA.

There are several treatment modalities such as surgical excision, laser surgery, photodynamic therapy, cryosurgery, immunotherapy and retinoid therapy (9, 10). The objective is to destroy all abnormal regions of skin and mucosa (2). Glanssectomy is an alternative surgical treatment for the Buschke-Lowenstein tumors located on the penis (11). Radiation therapy is contraindicated as anaplastic transformation occurs frequently (4). Local recurrence is common regardless of the method used and a high rate of recurrence is seen with increasing duration of the disease (12). In our case, the

lesion was excised surgically but local relapse was seen in the first month and a successful additional cryotherapy was applied.

We find this case worth reporting due to the unusual age, gender, anatomical localization and possible route way of transmission of the lesion.

Correspondence to: Arzu EREL, M.D.
Bilkent Üniversitesi
Lojmanları No: 22/4
Bilkent
06533 ANKARA - TÜRKİYE
Phone : 312 - 214 10 85 / 6101
Fax : 312 - 266 49 58
E-mail: aere@med.gazi.edu.tr

REFERENCES

1. Ives FA. The umbilical, perianal and genital regions. In: Textbook of Dermatology. Champion RH, Burton JL, Burns DA, Breathnach SM (Eds). 6th Edition. Blackwell - Science, Oxford. p 3163-3238.
2. Schwartz RA. Verrucous carcinoma of the skin and mucosa. *J Am Acad Dermatol* 1995; 32: 1-21.
3. Reichenbach I, Koebele A, Foliguet B, Hatier M, Masutti JP, Landes P. A Buschke and Lowenstein tumor in a female patient. *J Gynecol Obstet Biol Reprod (Paris)* 1995; 24: 491-495.
4. Sherman RN, Fung HK, Flynn KJ. Verrucous carcinoma (Buschke-Lowenstein tumor). *Int J Dermatol* 1991; 30: 730-733.
5. Sterling JC, Kurtz JB. Viral infections. In: Textbook of Dermatology. Champion RH, Burton JL, Burns DA, Breathnach SM (Eds). 6th Edition. Blackwell - Science, Oxford. p 995- 1095.
6. Penneys N. Diseases caused by viruses. In: Histopathology of the skin. Elder D, Elenitsas R, Jaworsky C, Johnson B.(eds) Lippincott-Raven, Philadelphia, 1997, p 569-589.
7. Niederauer HH, Weindorf N, Schultz-Ehrenburg U. Ein Fall von Condyloma acuminatum giganteum. *Hautarzt* 1993; 44: 795-799.
8. Hove MG, Hightower BJ, Graves K. Use of combining in-situ hybridization and immunohistochemistry in detecting human papillomavirus on routine sections in cases of diagnostic uncertainty. *Centr Afr J Med.* 2000 Aug; 46: 217-221.
9. Madrigal de la Campa MA, Ruiz Moreno JA, Palacios Ochoa Treatment of giant vulvar condylomata acuminata combining CO2 laser and electrosurgery. *J.Ginecol Obstet Mex* 2000; 68: 27-30.
10. Geusau A, Heinz-Peer G, Volc-Platzer B, Stingl G, Kimbauer R. Regression of deeply infiltrating giant condyloma (Buschke-Lowenstein tumor) following long-term intralesional interferon alfa therapy. *Arch Dermatol* 2000; 136: 707-710
11. Hatzichristou DG, Apostolidis A, Tzortzis V, Hatzimouratidis K, Ioannides E, Yannakoyorgos K. Glansctomy: an alternative surgical treatment for Buschke-Lowenstein tumors of the penis. *Urology* 2001; 57: 966-969.
12. Chu QD, Vezeridis MP, Libbey NP, Wanebo HJ. Giant condyloma acuminatum (Buschke-Lowenstein tumor) of the anorectal and perianal regions. Analysis of 42 cases. *Dis Colon Rectum* 1994; 37: 950-957.