

## ORIGINAL RESEARCH PAPER

**General Surgery** 

# BUSCHKE-LÖWENSTEIN TUMOR OF RECTUM: CASE REPORT

**KEY WORDS:** 

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#### INTRODUCTION

Verrucous carcinoma of the skin and mucosa is an uncommon type of well-differentiated squamous cell carcinoma. When it is present in the genitoanal region the term used is Buschke-Lowenstein tumor. Although it was first described by Buschke and Löwenstein in 1925. (BLT), better known as Giant condyloma acuminatum. It is a rare disease caused by human papillomavirus (HPV) with an incidence of 0.1% in general population and a male-to-female ratio of 2.7:1. Clinically, they present as exophytic, fungating masses, sometimes with a cauliflower-like morphology. It is transmitted via sexual contact<sup>1</sup>. The gross appearance is generally a bulky tumor suggesting an aggressive behavior, whereas histopathology reveals a relatively low-grade malignancy. Biologically, this tumor shows high recurrence rate and it is typified by a low incidence of metastasis.

#### **CASE REPORT**

A Twenty eight-year-old-male patient came with the complaint of palpable anal mass causing pain and difficulty in defecation. Initially, lesion was noticed arising from the right buttock and had been increasing slowly for six years causing discharge with unpleasant odour. The patient had no history of genital warts. The patient had no symptoms of acquired immunodeficiency syndrome.



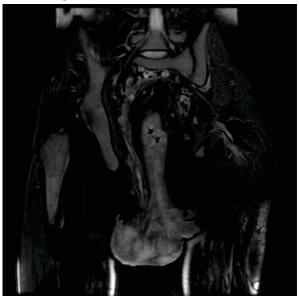
On physical examination, there was a large cauliflower like mass lesions in perianal region predominantly on right side measuring 12x12cm as a cauliflower-like tumour were seen at perianal region, it was painful with touching during digital rectal examination.

## Investigations

Chest x-ray was normal. Routine admission laboratory results were within normal limits. USG abdomen was done and no abnormality was detected. Digital Rectal examination and

colonoscopy could not be performed. Multiple biopsies were taken at various places .

## **MRI Findings**





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MRI of the pelvis revealed extensive 12x12x9cm mass lesion in perianal region with multiple branching linear fistulous track within the lesion extending superoanteriorly to external sphincter without obvious communication with anus. The anal canal is displaced towards left side. Lesion shows extension into the pelvis with no loss of fat plane with urinary bladder, external sphincter and internal sphincter. Lesion showed heterogenous enhancement on post contrast sequences.

#### HPE

The pathologic analysis of the specimens revealed epidermal squamous epithelium with hyperkeratosis, acanthosis, and papillomatosis and focal ulceration.

#### TREATMENT

An extensive surgical excision was performed with en bloc removal of the tumour and fistulas. Colostomy was performed to prevent faecal contamination and facilitate healing.





### DISCUSSION

Typically, this tumor presents as a slow-growing cauliflowerlike mass in genital or anorectal region with slow infiltration into deeper tissues. BLT is a rarely seen form which develops by the overgrowth of condyloma acuminatum and has a high risk of malignant transformation2. It often starts from longstanding condylomata and can reach up to 10-15 cm as in our patient. Evolution period ranged from 2.8 to 9.6 years, as reported in a systematic review done by Chu et al. which included 42 BLT cases; however, our patient had rapid growth in a year. Males are more commonly affected with male-tofemale ratio of  $2.7 \square : \square \square 1$ . When present in anorectal region, it is often associated with fistulas, anal stenosis, and abscesses. Bacterial superinfection is common and is associated with very foul smell. This tumor most often occurs in immunocompromised patients; however, it had a very aggressive course in our patient despite being virologically controlled and immune-reconstituted. Reported risk factors include anal receptive sex, HIV positive, immunosuppression, chronic irritation, and poor personal hygiene. Although lowrisk HPV6/11 appears central to pathogenesis of this neoplasm, it is unknown what causes transformation of benign condylomata into locally invasive Buschke-Löwenstein tumor. Gold standard for treatment is surgical resection with wide tumor-free surgical margins3. Systemic or topical chemotherapy and radiotherapy can be applied to patients to whom surgical operation cannot be performed. In cases where rectum and anal sphincter muscles are invaded, recurrence or malignant transformation is developed, there are various treatment options as abdominoperineal resection. Most of the authorities suggest a temporary loop colostomy to be opened to prevent fecal contamination in the wound

before wide surgical excision<sup>5</sup>. Since our case presented only anal mucosa involvement and malignant transformation was not detected, wide local excision was chosen. Laparoscopic loop sigmoidostomy was performed that is frequently used nowadays to prevent fecal contamination. Since malignant transformation was not observed in the histopathology of excised piece, chemoradiotherapy or any other new surgical invasion was not planned for the patient after surgery.

#### CONCLUSION

BLT is easily diagnosed as long as one is aware of its clinical existence and characteristic macroscopic and histological appearances. Before treatment, tumor biopsy and CT or MRI need to be performed to confirm diagnosis and determine the extent of invasion. Early surgical resection in the treatment of condyloma acuminatum prevents the development of BLT, but excision alone often is ineffective treatment for BLT. Abdominoperineal resection is necessary in cases with infiltration involving the sphincter muscles or rectum, especialy for recurrent cases. It is necessary to determine histopathologically whether a malignant transformation occurred, or whether the anal sphincter muscles and rectum are invaded with radiological and endoscopic imaging in BLT cases before the surgery for determining the surgical method.

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