

Giant Genital Condyloma Acuminatum: A case report

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Abstract

The giant condyloma acuminatum(GCA),also known as Buschke–Löwenstein tumor(BLT),is a type of human papilloma virus associated sexually transmitted infection. Various treatment options are available but best option amongst them is surgery. This case report present a GCA case in male with masses over lower abdomen and penile region where surgical resection is done, taking into account the high rate of recurrence and the significant potential of malignant transformation.

Introduction

The giant condyloma acuminatum (GCA), also known as Buschke–Löwenstein tumor (BLT), a type of sexually transmitted infection, was first described by Abraham Buschke and Ludwig Löwenstein^{1,5}.It is associated with human papilloma virus (HPV) infection type 11 and 6^{2,3}. Risk increases with poor hygiene, local irritation, immunosuppression, HIV infection, multiple sexual partners, and anal intercourse. Most common affected areas are perineum, vulva, vagina, perianal region, and rectum.⁴ It is cauliflower-like tumour of significant dimensions, with a slow development⁶. The BLT is known for the risk of malignancy like squamous cell carcinoma of the penis. Here we present a case of large genital growth by human papilloma virus with favourable surgical outcome.

Case Presentation

A 55 year old male presented in Outpatient department with the chief complaint of growth over the lower abdomen and penis for 15 years. On examination polypoidal growth were seen over the lower abdomen, groin, scrotum, perineum and penile region that were growing gradually. Size of lesion was 15cm × 8 × 3 cm(Fig.1). Patient underwent resection of growth which left the patient with large defect in lower abdomen as well as penis and scrotal area(Fig.2). Skin grafting was done over penis and scrotum while lower abdominal defect closure required raising of flaps to relieve tension(Fig.3). Specimen was sent for histopathological examination. The pathological examination revealed papillomatous, squamous epithelium with hyperkeratosis, acanthosis and keratin pearls. There was no evidence of dysplasia or malignancy. The lesion was positive for HPV 6 and 11. After the procedure was completed, the patient was informed of possible recurrence, which is common and presumably related to the infection in the surrounding healthy tissue. Post operatively wound infection occurred in groin region which was managed conservatively with antibiotics and wound dressing. Graft uptake was 70% with satisfactory wound healing. Patient was discharged on 7th day of operation and advised close follow up.

Discussion

Condyloma acuminatum is a sexually transmitted disease caused by HPV infection. It is a DNA virus causing various benign as well as malignant lesions involving the anogenital region. HPV can be transmitted by homosexuality, bad genital hygiene, chronic genital infections, and multiple sexual partners. On basis of their oncogenic potential HPV are of two types: low- and high-risk types.⁷

Condyloma acuminata is commonly associated with low-risk HPV types 6 and 11. About 90% of genital warts are caused by HPV 6 and 11^{2,3}. It has a incidence of 0.1% with a male-to-female ratio of 2.7:1.⁸ BLT is a rarely seen form which develops by the overgrowth of condyloma acuminatum and has a high risk of malignant transformation with high recurrence rate after treatment.⁴ Various treatment modalities have been described, but surgical excision with wide margins is the only definitive treatment.⁹ Non-surgical methods includes the application of a trichloracetic acid solution 80-90% or podophyllotoxin solution 0.5%, radiotherapy, chemotherapy, immunotherapy and cryotherapy with liquid nitrogen, but their efficiency is controversial.¹⁰ Surgical management includes classical surgery, electrosurgery (electrocoagulation, radiofrequency and carbon laser surgery) or both. Complications of surgical treatment are: local recurrence, haemorrhage, wound dehiscence, infections, pain, functional disabilities and malignant degeneration.¹⁰ In this case surgical excision has favorable outcome but as relapse and even malignant transformation of condyloma have been reported, close follow-up is needed.

Declarations

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Conflict of Interest: not applicable

Ethics approval: not applicable

Consent to participate: Written informed consent was obtained from the patient for participation.

Consent for publication: Written informed consent was obtained from the patient for publication.

Availability of data and material: not applicable

Code availability: not applicable

Authors contribution:

Poojan Thakor, Giriraj Prajapati: writing the paper

Mohit Budgurjar: Operated, revised and edited manuscript

Pankaj Saxena, Suman parihar: operated.

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Figures



Figure 1

Condyloma present in lower abdomen, penis and scrotum



Figure 2

Intraoperative image after excision of growth



Figure 3

Intraoperative image after reconstruction



Figure 4

Follow up image