Buschke–Lowenstein tumor treated with intralesional measles, mumps, and rubella vaccine

Sir,

Giant condyloma acuminatum, also known as Buschke–Lowenstein tumor (BLT), is a rare sexually transmitted disease that affects the anogenital region by human papillomavirus. BLT was first described by Buschke and Lowenstein in 1925. Even though there is huge armamentarium for treating BLT, there is no virus-specific antiviral therapy for them. Hence, the available treatments follow multimodal approach with surgery forming major part of it. Surgical removal of BLT is associated with many complications due to debulking of large lesion.

A 65-year-old male presented with a 3-year history of asymptomatic, cauliflower-like flesh-colored mass over the genitals. The patient had noticed a pea-sized lesion over the suprapubic area which gradually progressed to involve the penis and scrotum. He reported no fever, loss of weight,
and urinary symptoms. The patient gives a history of being in monogamous relationship for 35 years and denies previous promiscuous behavior.

On examination, the patient was afebrile and hemodynamically stable. Large cauliflower-like growth composed of multiple coalescing verrucous skin coloured papules measuring in total 10 cm × 10 cm over the mons pubis, root and shaft of the penis, and base of the scrotum [Figure 1]. Few skin-colored, sessile papules were also present over the scrotum. The lesion was nontender, and there was no local raise of temperature. Rest of physical examination was normal. Laboratory studies such as hemogram and liver and renal function tests were within normal limits. HIV and venereal disease research laboratory tests were nonreactive.

Histopathological examination revealed vacuolization of keratinocytes (koilocytes) in the upper epidermis with hypergranulosis and elongation of rete ridges with thick-walled capillaries and lymphocytic infiltrate in the dermis consistent with condyloma acuminatum. There was no histopathological evidence of malignant transformation [Figure 2].

A final diagnosis of Buschke–Löwenstein tumor was made. The patient was explained about the multiple intralesional injection of measles, mumps, and rubella (MMR), and written informed consent was taken. The patient was given intralesional injection of MMR vaccine of 0.1 ml over the base of large lesions, and subsequent injections were given every 15 days over the course of 4 months, a total of eight sittings. The tumor visibly reduced in size just after the first sitting and reduced to few lesions of <0.5 mm over the next 4 months [Figure 1].

BLT is a rare tumor, thus controlled studies examining various treatment modalities or well defined treatment protocols are lacking. This makes choosing of appropriate modality difficult. Newer topical therapies such as CO₂ laser surgery, intralesional bleomycin, topical 5-fluorouracil, and interferon-alpha are ideal choices for noninvasive cases.[1] Surgery is required in severe invasive cases but is associated with genitourinary complications, and risk of recurrence is high as potential spillage of tumor cells during surgery.[2] Chemotherapy and radiation therapy should be used only in case of disease recurrence because their effectiveness has not been fully documented.[1,2]

Immunotherapy is defined as a type of biological therapy that uses substances to stimulate or suppress the immune system to help the body fight cancer, infection, and other diseases.[3] Immunotherapy appears to enhance virus recognition by immune system, allowing clearance of treated wart, distant wart and helps to prevent infection. Hence, to stimulate cell-mediated immunity, various antigens of fungal, mycobacterial, and bacterial origins have been used.

MMR is a live attenuated vaccine. In a study by Dhope et al., about 65% of patients of common warts treated with MMR vaccine showed complete clearance after 3 injections.[4] In a similar study by Chauhan et al., 82.4% of patients with common warts showed complete clearance with minimal side effects.[5] Although immunotherapy helps in reducing the bulk of lesion, we have also planned for surgical removal of remaining tumor as now it is easily excisable with good control over bleeding and also helps to avoid recurrence or malignant transformation.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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An unusual case of giant chancroid ulcer

Sir,
Chancroid is a sexually transmitted infection caused by Haemophilus ducreyi with declining incidence. A typical chancroid lesion is characterized by the triad of undermining ulcer edge, purulent dirty gray base and moderate to severe pain. [1] All the three features are present in <50% of the sufferers. [2] There are various variants such as papular, dwarf, transient, follicular, giant, serpiginous, and phagedenic.

A 28-year-old married male presented with painful bilateral groin ulcers of 1-month duration. He denied a history of any extramarital exposure, any ulceration on external genitalia, or any swelling in the groin before the onset of ulcer. There were extensive dermatophytic infection and striae all around the ulcer with history of use of multiple over the counter topical steroids. Ulcers were around 15 cm × 8 cm × 3 cm, undermined and with necrotic slough [Figure 1]. Grams stain demonstrated gram-negative bacilli and culture, Escherichia coli. Biopsy from the lesion showed the characteristic layers seen in chancroidal ulcer—an ulcer covered by a scale crust made of fibrin, necrotic cellular debris, and acute inflammatory cells, below which shows diffusely mixed infiltrate of neutrophils and their nuclear dust along with lymphocytes, plasma cells, and histiocytes; blood vessels under the surface show abundant fibrin and scant leucocytoclasia [Figure 2]. Ulcer characteristics and biopsy findings pointed to the diagnosis of chancroid. Tests were done to rule out HIV, syphilis, and tuberculous ulcer.

The patient was treated with injection ceftriaxone 250 mg intramuscularly daily for 3 weeks and regular

Figure 1: Ulcers below and parallel to the inguinal ligament on either groin, with undermined erythematous edges and necrotic slough on base and surrounding skin showing dermatophytic infection and striae

Figure 2: (H and E stain, ×10 magnification) Ulcer covered by fibrin, necrotic debris, red blood cells, neutrophils, and their nuclear dust below which there is mixed infiltrate of lymphocytes, neutrophils and their nuclear dust, plasma cells and histiocytes

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