Lupus vulgaris of the glans penis: A rare presentation

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ABSTRACT

Tuberculosis of the penis is a rare presentation that may present as ulcers, papules, or nodules on the glans or shaft of penis. Herein we report one such case.

Key words: Cutaneous tuberculosis, glans penis, lupus vulgaris

INTRODUCTION

Tuberculosis is a global health problem.[1] Cutaneous tuberculosis is now rarely encountered in the Western countries, but is seen in developing countries where the incidence of tuberculosis is high.[2] Tuberculosis of the glans penis is an extremely rare presentation, with very few cases reported till date. Here, we report a case of lupus vulgaris of the glans penis, which presented in the form of long-standing painful papules.

CASE REPORT

A 23-year-old unmarried male patient presented at our OPD with a one-year history of multiple, raised, painful skin lesions on the glans penis. There was no history of remissions or exacerbations, nor any history of sexual exposure. The patient did not have a history of cough, hemoptysis, chest pain, dyspnea, hematuria, pain in abdomen, hematochezia, headache, weight loss, fever, or loss of appetite. There was no history of ulcers over the genitalia, burning micturition, or purulent discharge per urethra. He had undergone circumcision in his childhood as a part of religious practice. On examination, he was moderately built and nourished and afebrile. Four ill-defined, discrete, erythematous, firm, tender, papules were present on the glans penis, two on the dorsum of the glans and the other two on either side of the frenulum [Figure 1]. There were no ulcers, fissures, erythema, or edema over the glans penis and no discharge per urethra. Inguinal lymph nodes and other lymph nodes were not palpable. There were no other skin lesions elsewhere. BCG vaccination scar was visible. Mucosal examination was normal. Other systemic examination was normal. Histopathological examination of intact papule showed epithelioid granulomas consisting of Langhan’s giant cells, epithelioid cells, and lymphocytes [Figure 2]. Mantoux test was strongly positive, maximum diameter measuring 35 mm [Figure 3]. Other investigations done to search for any foci of tuberculosis elsewhere in the body like chest radiograph and abdominal and pelvic sonography were normal. Other routine investigations were normal. Enzyme-linked immunosorbent assay (ELISA) for HIV 1 and 2 and venereal disease research laboratory (VDRL) were nonreactive. At this stage, a diagnosis of cutaneous tuberculosis was made, and the patient was started on category 1 antitubercular therapy (ATT) with isoniazid 600 mg, rifampicin 450 mg, pyrazinamide 1500 mg, and ethambutol 1200 mg. The patient was reviewed again after six weeks of starting ATT, and all the lesions had subsided with the treatment; no ulcers or scars were present except for the biopsy scar [Figure 4]. The diagnosis of lupus vulgaris was confirmed and the treatment was continued.

DISCUSSION

In 1956, Pillsbury, Shelly and Kligman wrote, “In the skin, tuberculosis presents itself in an astonishing variety of forms, which has given rise to an unwieldy, overextended number of descriptive terms and bewildering classifications, almost impossible to grasp except by the most avid dermatologic taxonomist. The potentiality
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of the skin to react in many different ways to a single disease agent is nowhere better illustrated than in tuberculosis. Every variety of granuloma is represented: plaques, ulcers, verrucous lesions, nodules, papillomatous tumors, vegetative reactions and cicatricial infiltrates. A classification based entirely on the morphology of tuberculous lesions is not possible, since one type of the disease, e.g. lupus vulgaris, may present itself in all these forms. Various classifications have been proposed to classify cutaneous tuberculosis; recently a classification based on the bacterial load was proposed and accordingly classified into multibacillary forms (e.g., scrofuloderma, tuberculous chancre, and acute military tuberculosis) and paucibacillary forms (e.g., lupus vulgaris, tuberculosis verrucosa cutis, tuberculids). In our case, the diagnosis of lupus vulgaris of the glans penis was made based on the presentation of long-standing painful papules on the glans penis, tuberculoid granulomas on histopathology, negative Ziehl-Neelsen stain for acid-fast bacilli (AFB), strongly positive Mantoux test, with no foci of tuberculosis elsewhere in the body, and prompt response to ATT. Polymerase chain reaction (PCR) could not be done as the patient could not afford it. HIV and VDRL were negative, hence ruling out the possibility of syphilitic gumma.

Lupus vulgaris is the most common type of cutaneous tuberculosis and with the most varied manifestations. Lupus vulgaris originates from an underlying focus of tuberculosis, typically in a bone, joint, or lymph node, and arises by either contiguous extension of the disease from the underlying affected tissue or by hematogenous or lymphatic spread. Sometimes, the underlying focus is not clinically apparent, and in such cases, reactivation of a latent cutaneous focus secondary to previous silent bacteremia is postulated. It can also arise after exogenous inoculation like sexual intercourse from a partner.

These patients have a moderate or high degree of immunity against tubercle bacilli. Morphological expressions of lupus vulgaris are innumerable, and every possible variant of a granulomatous process is represented. Buttocks, thighs, and legs are more common sites of involvement in India. Glans penis is an extremely rare site for lupus vulgaris, with very few cases being reported so far. Jaisankar TJ et al. reported a case of penile
lupus vulgaris in 1994. Golchaj reported a rare presentation of lupus vulgaris on glans penis in a 60-year-old Iranian individual in 1997; the patient had presented with a one-year history of a painful erythematous crusted plaque on the glans penis. Various cases of other forms of tuberculosis like tuberculous chancre and papulonecrotic tuberculids on glans penis have been reported. Dutta et al. in 2001 reported a case of primary tuberculosis of the glans penis in a 47-year-old male who presented with ulcers over the glans which mimicked malignancy. Nath et al. in 2008 reported a case of papulonecrotic tuberculid of the glans penis in a 56-year-old married patient who presented with multiple ulcers. Recently, Kar et al. reported a case of primary tuberculosis over the glans penis in a 31-year-old male patient from Midnapur in August 2012. The presentation of lupus vulgaris on the glans penis is rare, with very few cases being reported till date.

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