

Primary Tuberculosis of Glans Penis - Mimicker of Malignancy: A Case Report and Review of Literature

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Abstract

Tuberculosis (TB) of penis is a rare form of genitor-urinary TB. It usually presents as an ulcerative or a nodular lesion. Most of the times, the diagnosis is delayed either due to a delay in onset of voiding difficulty or being masked by the presence of phimosis. In this case report, we present a case of a 65-year-old male presenting with ulcerative lesion involving the glans penis, mimicking a carcinoma. Biopsy confirmed TB and the lesion disappeared with antitubercular therapy. The purpose of this manuscript is to highlight the rarity of the disease and also to stress on the fact that not all ulceroproliferative lesions of the penis are malignant. Prompt diagnosis and appropriate treatment and a high index of clinical suspicion can to a large extent obviate the need for an ablative penectomy.

Key words: Antitubercular therapy, Phimosis, Penis, Tuberculosis

INTRODUCTION

Primary tuberculosis (TB) of glans penis is an extremely rare condition. With active implementation of Global TB Eradication Programme by the World Health Organization (WHO), and by its "STOP TB" campaign, the WHO has been taking all possible efforts to eradicate TB by 2050.^[1] The overall incidence of TB penis is on the decline. With an ever-increasing awareness among the public and patients, the overall incidence of TB penis has further declined in the current era.^[2]

CASE REPORT

A 65-year-old male presented with ulcerative lesion of glans penis of 4 months duration. The growth was

slow growing and insidious in onset and was painful. Over the past 2 months, he noticed whitish discharge from the growth surface that foul smelled. He did not have any voiding difficulties. His wife was on treatment for pulmonary TB for the past 6 months. However, he denied having coitus for the past 3 years. Figure 1 describes the ulcerative lesion at the time of presentation. Figure 2 shows the lungs and kidneys to be free from the disease.

On examination, an ulcerative lesion with surrounding erythema and induration was found over the glans penis. There was a foul-smelling purulent discharge from the surface of the lesion. The prepuce was densely adherent over the glans penis, which bled even on gentle separation. A dorsal slitting of the prepuce was done and an edge-wedge biopsy taken from the lesion.

Figure 3 illustrates the microphotograph of the biopsy specimen in low and high power. The section revealed skin with ulceration and abscess formation of subcutaneous tract with abscess lined by granulomas comprised epithelioid cells, Langhans' giant cells, and a dense cuff of lymphocytes. Three consecutive urine smear for acid-fast

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bacilli (AFB) and urine for AFB culture were found to be negative. A diagnosis of primary TB of the penis was made, and the patient was started on antituberculous therapy (ATT). He was given four drugs including isoniazid, rifampicin, pyrazinamide, and ethambutol for 2 months and rifampicin and isoniazid for the next 4 months.

Following 8 weeks of ATT, the lesion almost completely regressed. The erythema surrounding the ulcerative lesion completely disappeared and the pain also disappeared. Figure 4 depicts the post-treatment images, where the lesion and the induration had completely vanished.



Figure 1: Pre treatment image showing the lesion

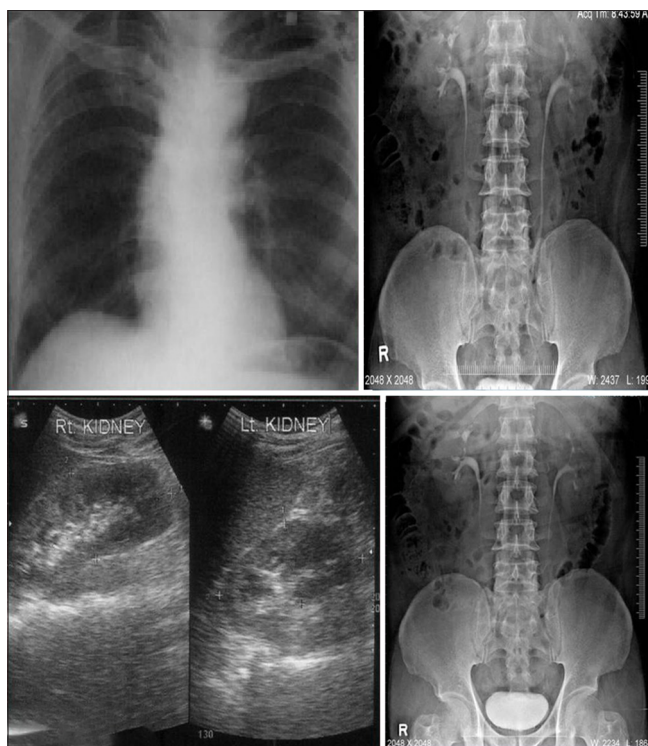


Figure 2: Imaging showing the chest and kidneys to be free from tuberculosis

DISCUSSION

TB is a major health problem. It is the most widespread and persistent human infection in the world. This can affect any organ and can mimic any illness, and hence, it is called, “a great mimicker.”^[3] Millions of people are affected by TB every year, and it ranks alongside human immunodeficiency virus as a leading cause of death worldwide.^[4]

TB of penis presents as lesions in the glans or shaft of penis. It constitutes to <1% of all cases of TB of genitalia in males.^[5] Fournier is considered to have first described the disease in 1848, where the patient had multiple ulcerative lesions of the penis, with regional lymphadenopathy.^[6] TB of penis can be classified into two broad types: Primary and secondary. Secondary TB of penis occurs along with evidence of pulmonary TB elsewhere and occurs by hematogenous dissemination from other primary localizations.^[7] Primary TB, on the other hand, occurs traditionally as sequelae of ritual circumcision, where the operator sucks the circumcised penis. Sucking was done as a hemostatic and a styptic measure. Some of them had open TB and had readily transmitted the infection onto the circumcised penis.^[8] Such measures have practically been eliminated in current practice, and the overall incidence has significantly come down in the past two decades. Primary TB can also occur due to coital contact with the disease already present in

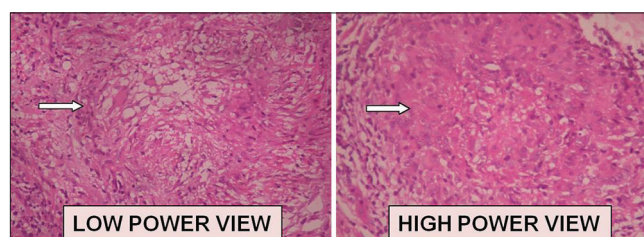


Figure 3: Microphotograph showing skin with ulceration with abscess formation of subcutaneous tract



Figure 4: Post treatment image showing a complete resolution of the lesion

the female genitalia or from the clothing that is infected with tubercle bacilli.^[9]

There also exists a confusion regarding the exact nomenclature of penile TB. Various other classifications for TB penis are also being proposed and the common ones include true TB, penile tuberculide, papulonecrotic tuberculide, and ulcerated lupus vulgaris.^[10] Many a time, demonstration of AFB may not be possible in the biopsied specimen and a decision to call it TB may purely be based on rest of the corroborative findings such as epithelioid granulomas and Langhans' giant cells. Ramesh *et al.* have stated that it becomes difficult to distinguish tuberculides from other forms of cutaneous TB. Hence, lesions localized to the glans penis may be more appropriately referred to as "TB of glans penis."^[11]

TB of penis characteristically affects the skin, glans, or corpora cavernosa. Most of them are ulcerative as in our case or rarely may present as an isolated nodule or papulonecrotic tuberculides.^[12,13] Unless the possibility of TB affecting this organ is thought of, it is often likely to be missed in clinical practice. This condition responds well to medical management with ATT, and the lesion is expected to regress well with conservative measures.

The purpose of this case report is to highlight that a prompt diagnosis, appropriate treatment, and a high index of

clinical suspicion could to a large extent obviate the need for an ablative procedure in the form of partial penectomy.

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