TUBERCULOSIS OF THE GLANS PENIS

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ABSTRACT

A rare case of tuberculosis of the glans penis is described in a 60 year old Iranian individual.

Keywords: Tuberculosis, Lupus Vulgaris, Penile Tuberculosis.


INTRODUCTION

Tuberculosis of the penis is a rare form of cutaneous tuberculosis. The lesion may be primary or secondary, depending on the presence or absence of tuberculosis elsewhere. Primary cases occur from direct inoculation and the secondary type may occur after infection of other genitourinary organs or due to hematogenous spread from the lungs.

Case report

A 60 year old Iranian male had a 1 year history of a painful erythematous crusted plaque on the glans penis. He had been treated several times with topical and systemic antibiotics. Examination revealed an infiltrated red crusted and necrotic plaque with a yellowish discharge (Fig. 1).

The urethral meatus was completely obliterated and urine drained across a fistula in the sulcus. Regional lymph nodes were tender and mildly enlarged. The patient's chest x-ray was normal. E. coli was isolated from the urine but the patient's urine culture was negative for Mycobacterium tuberculosis. Urine and ulcer staining for acid fast bacilli were both negative. The PPD test was 20 mm positive and other routine exams were all normal.

Two punch biopsies of the glans were obtained which both showed chronic inflammation and pseudohyperplasia. A final deep biopsy revealed a granulomatous reaction with Langhans-type giant cells.

The patient was treated with INH (300 mg/d), rifampicin (450 mg/d) and ethambutol, 800 mg daily. After 3 months marked improvement was noticed (Fig. 2) and complete cure was achieved after 9 months of multi-drug chemotherapy.

Fig. 1. The patient before treatment.

Fig. 2. The patient three months after commencing therapy.
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DISCUSSION

Tuberculosis of the penis is extremely rare. In 1870, Soioweitschnik reported a case of penile tuberculosis.\(^1\) Lewis reported 110 cases of penile TB in 1946. Most of these were in Jewish boys who had been circumcized in the customary way.\(^2\) In 1971 Lal et al.\(^3\) presented 29 cases; from among these, 14 were primary and the remainder had been secondarily infected. One primary case was due to coitus, but the others were undetermined. Among the secondary cases eight had genitourinary tuberculosis, three had pulmonary tuberculosis, one case had both pulmonary and genitourinary tuberculosis, one had skin lesions and in the remaining cases the nature of the lesions was not stated.\(^3\)

Akira Konohana reported a primary case of penile tuberculosis and he isolated *Mycobacterium tuberculosis* from the ulcer.\(^4\) Recently Reddy et al. reported a case of penile lupus vulgaris.\(^5\)

Lupus vulgaris is a progressive form of skin tuberculosis, the lesions of which usually appear in normal skin as a result of primary inoculation or secondary extension of an underlying diseased organ by the lymphatic or hematogenous route. The significant histopathologic changes are made up of tubercles or tuberculoid granulomatous inflammation consisting of epithelioid, giant and inflammatory cells, lymphocytes, plasma cells and polymorphonuclear leukocytes.

Caseation necrosis within the tubercles is slight or absent. Staining and culturing for tubercle bacilli are usually unsuccessful and require special stains and techniques.\(^6\)

Among the conditions that may clinically simulate the ulcerative or vegetative form of lupus vulgaris on the glans are squamous cell carcinoma, deep fungal infections and extramammary Paget’s disease.

In conclusion, due to an absence of organ involvement, a negative smear for tubercle bacilli and a granulomatous tuberculoid appearance on histopathological examination, the present case is a form of penile lupus vulgaris.

REFERENCES