

Tuberculous ulcer of the penis

N. R. VENKATARAMAIAH†
M.D.

J. A. VAN RAALTE†
M.D.

S. N. DUTTA*
M.D.

*Departments of *Surgery and †Histopathology, Muhimbili Medical Centre, Dar es Salaam, Tanzania*

Summary

Two cases of tuberculosis of the penis are presented because of the rarity of the disease. Stress is laid on the histopathological confirmation of the diagnosis of all penile ulcers before contemplating the line of treatment.

Introduction

Tuberculosis of the penis is an extremely rare disease (Lowsley and Kirwin, 1944; Walker and Jordan, 1968; Burns and Thompson, 1970; Narayana, Kelly and Duff, 1976). It can present as superficial ulcers of penile skin or tuberculous cavernositis. It may be a secondary manifestation of tuberculosis (TB) of the urogenital tract. It is also known to occur following ritualistic circumcision.

Because of the rarity of this condition, 2 further cases are now described.

Case 1

A 38-year-old Tanzanian male was admitted to the surgical ward of Muhimbili Medical Centre with progressive ulceration of the penis and adjoining penile shaft in January 1980.

He had first noticed ulcerations of the prepuce 2 years before when he was treated with antibiotics without any relief. The ulcers had coalesced resulting in a large ulcer involving the glans and adjoining shaft of the penis. On examination, the ulcer was situated on the ventral aspect of the penis involving the glans, corona glandis and the shaft (Fig. 1). The extension deeper down had caused the destruction of urethra, and urine was seen coming out through the opening in the mid-penile part of the urethra. A biopsy of the ulcer showed a granulomatous lesion with areas of caseous necrosis which is



FIG. 1. The ulcer on the ventral aspect of the penis (one week after the suprapubic cystostomy).

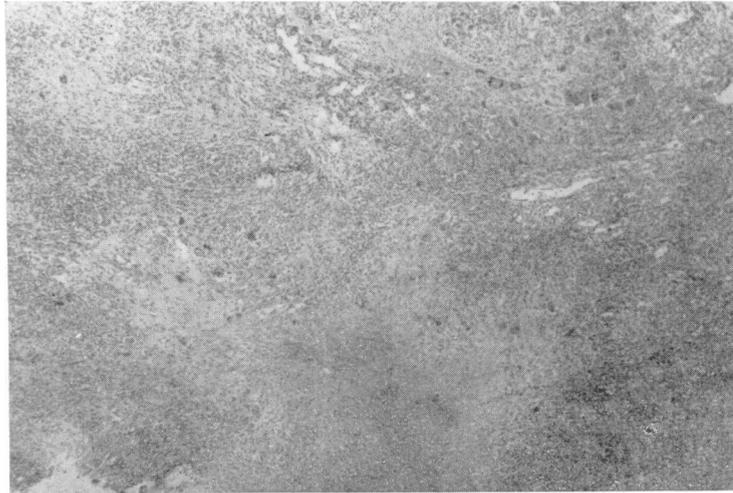


FIG. 2. Biopsy from the ulcer of the penis shows a granulomatous lesion with giant cells and central necrosis. (HE, $\times 200$).

compatible with a diagnosis of tuberculous ulceration of the penis (Fig. 2).

In the light of the biopsy report the patient was investigated further. The Heaf test was strongly positive. A smear from the ulcer was negative for acid-fast bacillus. There was no clinical or radiological evidence of TB of the lungs and genito-urinary TB was ruled out by relevant investigations. Suprapubic cystostomy was done to divert the urinary stream but this did not help to heal the ulcer. He was treated with streptomycin, isoniazid and thioacetazone. Streptomycin was discontinued after a total dose of 60 g but isoniazid and thioacetazone were continued. The ulcer healed within 2 months. The healed ulcerated area was resurfaced and surgery for reconstruction of the urethra is now in the final stage.

Case 2

An 80-year-old Tanzanian male was admitted to the surgical ward of Muhimbili Medical Centre with complaints of swelling and ulceration of the glans penis with narrowing of the urethral meatus. The patient was submitted to a biopsy and meatotomy. A biopsy was done from the ulcer of the glans penis. The patient refused further treatment and discharged himself against medical advice. The biopsy showed granulomatous lesions with areas of caseous necrosis suggesting the possibility of TB.

Discussion

Tubercular ulceration of the penis is rare even in countries where TB is prevalent and genito-urinary TB is not uncommon. There is no reasonable ex-

planation for this. In both of the above cases, bacteriological confirmation could not be obtained. However, good response to antituberculous treatment in case 1 supports the diagnosis of TB. In case 2, the absence of bacteriological evidence and follow-up of the patient poses a problem. But the histological picture suggests a probable diagnosis of TB.

Both these cases came for treatment in a late stage of the disease with gross destruction of the penile shaft and urethra. Such cases are likely to be mistaken for cancer of the penis, and mutilating surgery may be undertaken, unless a pre-operative histopathological investigation is routinely done. Every case of chronic ulcer of the penis should be subjected first for histopathological examination before a definitive treatment is contemplated. Early diagnosis can prevent the progress of the disease and even when gross destruction has occurred as in case 1 the condition can be controlled with antitubercular drugs followed by reconstructive surgery for restoration of the destroyed part of the external genital organ and the urethra.

References

- BURNS, E. & THOMPSON, I. (1970) *Urology* (Ed by Meredith, F. Campbell & Hartwell Harrison, J.), 3rd edn, Vol. 1, p. 526. W. B. Saunders Company, Philadelphia, London, Toronto.
- LOWSLEY, O.S. & KIRWIN, T.J. (1944) *Clinical Urology*, 2nd edn, Vol. 1, pp. 287-288. Williams and Wilkins, Baltimore.
- NARAYANA, A.S., KELLY, D.G. & DUFF, F.A. (1976) Tuberculosis of the penis. *British Journal of Urology*, **48**, 274.
- WALKER, D & JORDAN, W.P. (1968) Tuberculous ulcer of penis. *Journal of Urology*, **100**, 36.