Primary Tuberculosis of the Glans Penis

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Abstract

Primary Tuberculosis of penis is an extremely rare entity, even in the developing countries. We report a case of a 31 years old male patient who presented to us with some ulcerated lesions on the glans penis and was diagnosed as primary tuberculosis of glans penis, confirmed by biopsy and supported by a strongly positive Mantoux test and positive TB-PCR. The patient responded to anti-tubercular therapy well. There was no co-existing tuberculosis infection elsewhere.

Introduction

Tuberculosis of penis is extremely rare. It presents as lesions on the glans or shaft of penis and may mimic a malignant disease, ulcers or a nodule. In our case the lesion occurred in the form of ulcerated lesions over the glans with undermined edges and indurated base mimicking a malignant lesion.

Case Report

RD- a 31 years-old married male patient from Midnapur, West Bengal presented with multiple non-healing ulcers over the glans penis of 6 months duration. He was a heterosexual individual and his wife did not have any genital lesions or discharge. No urinary symptoms were present.

There was no history of trauma, weight loss, fever, cough or other constitutional symptoms. There was no personal and family history of tuberculosis. H/O repeated courses of different antibiotic therapy empirically including three 7 days courses of quinolones (ciprofloxacin, ofloxacin, and levofloxacin), One 10 days course of Inj Amikacin 500mg IM once daily, Inj Benzathine penicillin 1.2 Million unit deep IM weekly for three weeks by local doctors gave some relief but did not yield desired results.

On physical examination, there were multiple, superficial and deep tender ulcers on the glans penis with irregular undermined edges and indurated base (Figure 1). Some ulcers were partially healed but still have undermined irregular edges. The urethral meatus was hidden by these ulcerative lesions. Rest of the genital examination was normal. There was a lymph node of 1 cm diameter in the right inguinal region. Other muco-cutaneous body lesions were unremarkable.

Investigation

Hematological examination showed Hb -11.2 gm%. TLC - 7800/cumm., N-68%, L-36% E-4%, M-2%, B-0% and ESR 36 mm/hr. Blood sugar and BUN were normal. Urine sediment examination for AFB and urine culture were noncontributory. HIV antibodies test and VDRL test were nonreactive. Systemic evaluation including X-ray chest for any focus of tuberculosis was unremarkable. Radiological and ultrasound evaluation of the genitourinary system was normal. Biopsy from the ulcer edge showed epithelioid cell granuloma with Langherans giant cells, suggestive of tuberculous granuloma. FNAC of the said lymph node was non-specific. Mantoux test read after 72 hours showed 15mm x14mm induration. TB-PCR was positive.

The patient was put on anti-tubercular treatment (DOTS, Category-III for Sputum AFB –ve extra-pulmonary tuberculosis, not seriously ill, under Govt. of India RNTCP, three days a week,) for 6 months i.e. isoniazid (600 mg), rifampicin (450 mg) and pyrazinamide (1.5 g) for first 2 months, followed by isoniazid (600 mg) and rifampicin (450 mg) for next 4 months along with pyridoxine. The lesions started responding to therapy in next two weeks and complete healing with residual depressed scars occurred at the completion of the therapy.

Discussion

Tuberculosis is still a major cause of morbidity in developing countries like INDIA but tuberculosis of the penis is very rare. Till 1999, only 161 cases of penile tuberculosis were reported.1,5

It may be primary or secondary. The primary cases can occur as a complication of ritual circumcision, during coital contact with the disease already present in the female genital tract, or even from infected clothing. The bacilli are inoculated into abrasions caused by vigorous sexual activity since normal mucosa is highly resistant to tuberculosis.2 Sometimes penile lesions may be caused by inoculation of the bacilli through his own infected ejaculate(3). BCG vaccine induced primary tuberculosis of penis after immunotherapy for carcinoma urinary bladder were also reported.4

Tuberculosis of penis may affect the skin, glans or cavernous bodies. In most cases the lesion takes the form of an ulcer as occurred in our case, a nodule or papulo-necrotic tuberculides. Tuberculides are hypersensitivity reactions to Mycobacterium tuberculosis or its products in individuals with good immunity. These cases are characterized by positive tuberculin test, evidence of present or past tuberculosis, absence of M. tuberculosis in the skin lesions and response to anti-tubercular treatment.3 Papulo-necrotic tuberculides are characterized by recurrent eruptions of asymptomatic, dusky red papules, which ulcerate and crust, and heal after a few weeks with varioliform scarring. These occur symmetrically and predominantly on the extensor aspects (legs, knees, elbows, hands and feet) of the extremities. Other areas that may be rarely affected are the ears, face, buttocks, and penis.4 Young adults are predominantly affected. Anti-tubercular drugs are the mainstay of treatment. The female partner should always be evaluated for genital tuberculosis. Some ulcers in our case showed partial healing state probably due to affect of

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Conclusion

Most of us have not encountered such a disease in our practice life. This report may increase our awareness of this curable condition, in the differential diagnosis of penile ulcers. Histopathological examination is essential to differentiate it from Carcinoma penis.

References


Fig. 1: Primary Tuberculosis of the glans penis showing multiple ulcers with undermined edges quinolones and inj amikacin as they are 2nd line anti-tubercular drugs, thus misled previous attending doctors.