

Case Report

Rare case of Primary Tuberculosis of Penis mimicking malignant ulcer

Nagabhushana M¹, Dr Karthikeyan. V.S², Dr. Sumit Kumar², Dr Sachin Darwadkar²,

¹MBBS, MS, MRCS (Edn), MCh, Dept of Urology, Institute of Nephrourology, Victoria Hospital Campus, Bangalore-560002, India

²MBBS, MS, MCh, Dept of Urology, Institute of Nephrourology, Victoria Hospital Campus, Bangalore-560002, India

*Corresponding author

Nagabhushana M,

Email: nagbhushan2001@gmail.com

Abstract: In literature very few cases of primary tuberculosis of penis has been reported. It is rare even in developing countries like India where pulmonary tuberculosis is common. We report a case of a 61 years old male patient who presented with non healing slowly progressive ulcer over the shaft of the penis for six months with history of taking multiple antibiotics. The lesion was appearing like malignant penile ulcer. Lesion was diagnosed as tubercular ulcer by wedge biopsy. On further investigation there was no evidence of Tuberculosis elsewhere. Under antitubercular treatment, total penectomy with perineal urethrostomy was done and anti tubercular treatment was continued for 6 months. No evidence of recurrence during the follow up of 3 years.

Keywords: Tuberculosis of penis, total penectomy and perineal urethrostomy

INTRODUCTION

Even in countries where tuberculosis is highly prevalent, tuberculosis of penis is extremely rare. It presents on the glans or the shaft of the penis as an ulcers, nodule or papulo-necrotic tuberculides. Lesion may mimic like a malignancy and usually diagnosed as a histological surprise. In our case, the lesion occurred in the form of an large ulcerated lesion with a indurated base and everted margin over the shaft of the penis mimicking a malignant lesion.

CASE REPORT

61 years-old married male patient from Gulbarga, Karnataka presented with non-healing, slowly progressing ulcer over the shaft of the penis for 6 months duration. No history of hematuria or dysuria. There was no history of trauma, weight loss, fever, cough or other constitutional symptoms. There was no personal or family history of tuberculosis. Patient had taken repeated course of antibiotic by various local doctors. He was a heterosexual individual and his wife did not had any genital lesions or discharge. On examination, there was a large, nontender ulcer covered with slough with indurate base and edges similar to malignant ulcer was present on lateral aspect of shaft of penis (Figure 1). On palpation, ulcer was nontender with edge and base of the ulcer along with surrounding cavernosa was indurated. Inguinal lymphnodes were enlarged in both sides and were nontender, firm in consistency. Other genital and systemic examination was normal.



Fig-1: Large ulcer of size 6 X 4 cms presenting on the right lateral surface of the penis.

Primarily diagnosed as malignant ulcer, wedge biopsy was done after basic investigation. As a histological surprise, biopsy from the ulcer showed epithelioid cell granuloma with caseating necrosis showing typical Langerhans giant cells, suggestive of tuberculous granuloma. FNAC of the inguinal lymph node was non-specific. Mantoux test and TB-PCR was positive. Urine for AFB was negative. Chest X-ray to rule out pulmonary tuberculosis was normal. Ultrasound evaluation of the abdomen and intravenous pyelogram of genitourinary system were normal. Other investigation like liver function tests, HIV and VDRL was normal.

Patient was started on standard anti tubercular regime under DOT regime. After 3 weeks of anti tubercular treatment, patient was subjected to total

penectomy with perineal urethrostomy. Wound healed well and SPC was removed. Anti tubercular treatment was continued for 6 months. No evidence of recurrence during the follow up of 3 years.

DISCUSSION

In developing countries like INDIA, Tuberculosis is still a most prevalent communicable disease. But even in population where Tuberculosis is more prevalent, extra pulmonary tuberculosis accounts for 10% of cases[1]. While tuberculosis of lymph nodes is most common extra pulmonary tuberculosis, genitourinary involvement is not uncommon and accounts for 30% to 40 % of extra pulmonary tuberculosis[2,3]. Tubercular involvement of penis is very rare feature of genitor-urinary infection[3]. In 1848, Fournier described the first case of a patient with multiple penile ulcers and regional lymphadenopathy[4]. Only 161 cases of penile tuberculosis were reported till 1999[5,6]. Penile tubercular involvement may be primary or secondary. The primary cases occur as a complication of ritual circumcision during which the operator sucks the circumcised penis as a haemostatic and styptic measure. Some of these have open pulmonary tuberculosis[7,8]. But this act is now totally abandoned in all over the world, so this as a cause for tuberculosis of the penis is rarely seen now. Presently most common mode of transmission of primary tuberculosis by coital contact with the disease already present in the female genital tract or from infected clothing[9]. As normal genital mucosa is highly resistant to infection of tubercular bacilli, abrasions caused by vigorous sexual act or breach in the mucosa due to other sexually transmitted diseases can cause bacilli inoculation[10]. Sometimes, a penile lesion may be caused by reinoculation of the male partner through his own infected ejaculate as vagina is particularly resistant to tuberculosis[7]. BCG vaccine induced primary tuberculosis of penis after immunotherapy for carcinoma urinary bladder was also reported[11]. Secondary penile tuberculosis can present along with active pulmonary tuberculosis. Indeed, it affects skin, glans and cavernous bodies as superficial lesion[2]. Sometimes there may be difficulty in differentiating it from malignant tumours[12]. So, it is necessary to do histopathological examination of the involved tissue by taking biopsy of the lesion for accurate diagnosis. In most cases, the lesion appears as a superficial ulcer on the glans or around the corona as it is the most common part rubbed during sexual contact or with infected clothing[8]. The lesion may be associated with or may present as a nodule or papulonecrotic tuberculides. It should be suspected in any asymptomatic, dusky red papules over penis, which ulcerate and crust and heal after a few weeks with varioliform scarring or any ulcer which is not responding to routine course of antibiotic course. Tuberculous infection can be confirmed by Polymerase chain reaction. Rest of the urogenital system

involvement should be evaluated by careful clinical examination and Intravenous urography. Associated pulmonary tuberculosis should be ruled out by Chest X ray and if needed sputum AFB. Anti-tubercular drugs are the mainstay of treatment. The female partner should always be evaluated for genital tuberculosis. Surgical intervention in the form of either partial or total penectomy may be required rarely as in our case, when ulcers had largely destroyed the penis due to late presentation.

CONCLUSION

Tuberculosis of penis should be considered in the diagnosis of long standing or recurrent ulcer otherwise diagnosis may be missed or delayed. This condition promptly responds to Anti tubercular therapy but neglected cases may require additional surgical intervention as evidenced by our case.

REFERENCES

1. Panigrahy R, Das SK, Rout S, Sahu MC, Padhy RN ; Primary tuberculosis of the glans penis-a rare case report. *Asian Pac J Trop Dis* 2014; 4(S2): 653-655.
2. World Health Organization. Global tuberculosis control: WHO report 2011. Geneva: World Health Organization; 2011. Available from: http://www.who.int/tb/publications/global_report/2011/gtbr11_full.pdf?ua=1.
3. Figueiredo AA, Lucon AM, Junior RF, Srougi M; Epidemiology of urogenital tuberculosis worldwide. *Int J Urol*, 2008; 15(9): 827-832
4. Lewis EL; Tuberculosis of the penis: a report of 5 new cases, and a complete review of the literature. *J Urol*, 1946; 56(6): 737-745.
5. Sah SP, Ashok Raj G, Joshi A; Primary Tuberculosis of the glans penis. *Australas J Dermatol*, 1999; 40(2): 106-107.
6. Nath AK, Janakiraman SK, Chougule A, Thappa DM; Penile papulonecrotic tuberculid: Revisited. *Indian J Dermatol*, 2008; 53(4): 220-221.
7. Devine JC, Jordan GH, Schlossberg SM; Surgery of the Penis and Urethra. In: Witsh, P.C. Retick, A.B., Stamey, T.A., Vaughan, E.D. eds.: *Cambell's Urology*, Vol-3, 6th Edn. Philadelphia: W.B. Saunders. 1992, 2960.
8. Narayan AS, Kelley DG, Duff FA; Tuberculosis of the Penis; *Br. J. Urol*, 1976; 40: 274.
9. Baskin LS, Mee S; Tuberculosis of the penis presenting as a subcutaneous nodule; *J. Urol*, 1989; 141(6): 1430.
10. Lal MM, Sekhon GS, Dhall JC; Tuberculosis of the penis. *J Indian Med Assoc*, 1971; 56: 316-318.
11. Sharma VK, Sethy PK, Dogra PN, Singh U, Das P; Primary tuberculosis of glans penis after intravesical Bacillus Calmette Guerin immunotherapy. *Indian J of Dermatol Venerol Leprol*, 2011; 77(1): 47-50.
12. Mayaud C, Cadranet J; Tuberculosis in AIDS: past or new problems? *Thorax*, 1999; 54(7): 567-571.