Primary Penile Tubercular Ulcer

D Sharma, T Ramchuran, M Kaif, A Ghosh, Puneet, V Shukla

Citation

D Sharma, T Ramchuran, M Kaif, A Ghosh, Puneet, V Shukla. *Primary Penile Tubercular Ulcer*. The Internet Journal of Urology. 2006 Volume 5 Number 1.

Abstract

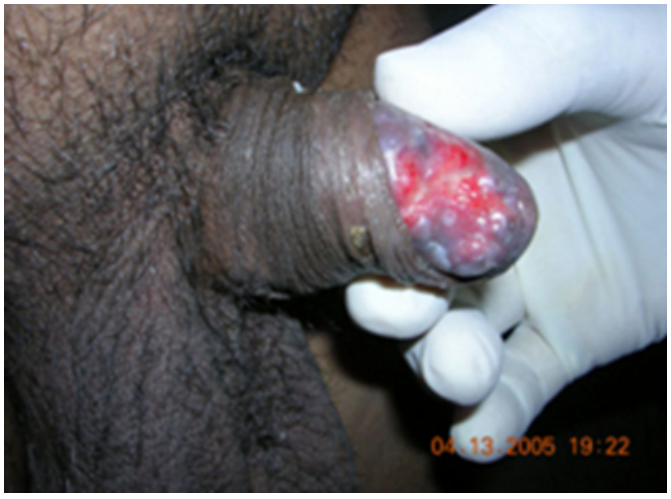
Although tuberculosis of the penis is rarely reported even in endemic countries like India, it is wise to exclude it in cases of suspicious penile ulcers by relevant investigations after a thorough history taking. Prompt administration of SCC can even lead to complete healing of the lesion without leaving behind any sequelae.

CASE REPORT

A 45 year old uncircumcised man came to the out patient department with a painful ulcer over his glands penis for the last two months. It had initially started as a small nodule which ruptured forming the ulcer and grew to its present size. (Figure 1) He had no history of trauma or any other systemic illness.

Figure 1

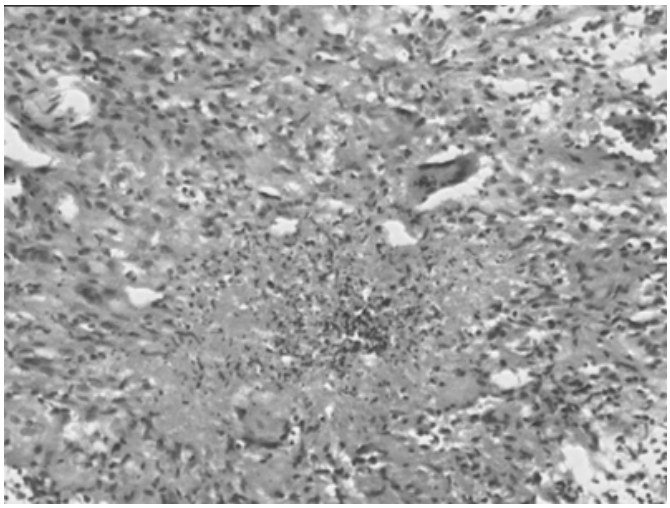
Figure 1: Ulcer over the glans penis with unhealthy granulation



Physical examination revealed an ulcer of about 2 X 2 centimeter (cm) over his glands penis mainly towards the right side. It was irregular in shape, had undermined edges with unhealthy granulation tissue at its floor. The lesion was mildly tender and was surrounded with minimal induration. The external urethral meatus was spared from the lesion and there were no evidence of inguinal lymphadenopathy. His laboratory tests and chest x-ray were unremarkable. A provisional diagnosis of carcinoma of the penis was made and a biopsy was taken from the edge of the ulcer. It revealed tuberculuos granulation tissue with evidence of caeseation (Figure 2)

Figure 2

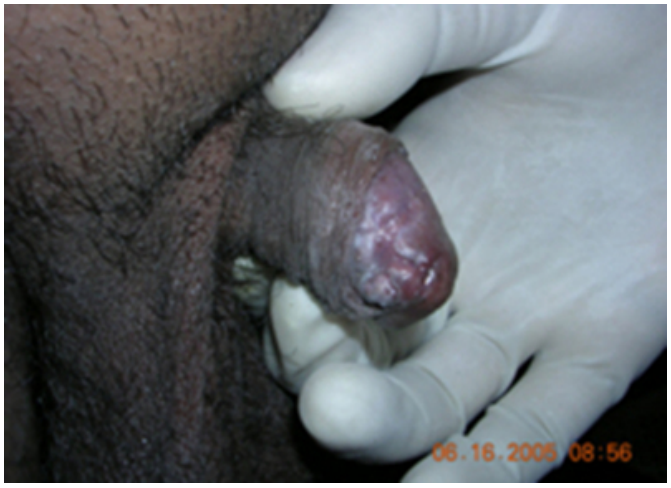
Figure 2: Epitheloid granuloma with caseous necrosis. Langhan's giant cells also seen at the periphery (Hematoxylin and eosin x 100)



The patient was put on oral four drug regime of Rifampicin(R), Isoniazid(H), Ethambutol(E) and pyrazinamide(Z) and was followed up every 15days. He responded well to his treatment and the ulcer showed significant evidence of healing at 2 months (Figure 3). At the end of treatment at 6 months the ulcer had completely disappeared with a very little residual scarring of the glands.

Figure 3

Figure 3: Healed Ulcer after 60 days of anti tubercular treatment.



DISCUSSION

Penile tuberculosis is an extremely rare form of genitourinary tract tuberculosis even in developing countries where the prevalence of tuberculosis is high[1]. Penile tuberculosis was first described by Hellerstrom and later by Bafverstedt and Hageman[2]. In 1896, Darier put forward the concept of tuberculids whereby penile tuberculosis was explained as being the result of a cutaneous hypersensitive response to an underlying focus of tuberculosis.

So far, three forms of penile tuberculosis have been identified[1]. The primary form is caused by direct inoculation of mycobacterium in the glands during coitus with a patient of genital tuberculosis[3], oral intercourse with an active pulmonary koch's patient, wearing of contaminated fabric or at the time of circumcision. The secondary form, also called as tuberculid occurs as a result of either hematogenous spread from a primary focus (commonly lungs) or as a cutaneous hypersensitive response to an underlying focus[4]. The third variety is the result of direct extension through urethra into penile shaft from neighbouring genitourinary tubercular foci (prostate, seminal vesicle). An isolated case of penile tuberculosis has been reported as a complication of intravesical BCG therapy in superficial bladder carcinoma, probably due to traumatic catheterization[5].

The causative agents are Mycobacterium tuberculosis, Mycobacterium Bovis and Mycobacterium Celatum[6]. The lesion presents commonly as a painful ulcer over glans penis. However it may present as an superficial ulcer over the inner lining of prepuce, as a subcutaneous nodule or cold abscess in the corpora cavernosa (Corpora cavernositis)[4]. Oral doses of Isoniazide 300mg/day, Rifampicin 600mg/day, Etambutol 800mg/day along with Pyrazinamide 1500/day for 2months followed by only HR for next four months[7] is the standard recommended treatment. Patients generally show good recovery within 2 months. Occasionally residual scar is seen for which plastic reconstruction may be needed[7]. In cases with concomitant urethral stricture, surgical reconstruction is done first followed by Anti tubercular treatment[8]. However in cases with severe obstructive uropathy, immediate urinary diversion is always the rule to prevent renal loss[8]. Prognosis is usually very good with remission within a couple of months and no recurrence after 1 year of follow-up. The excellent response to SCC is probably due to the fact that mycobacteriums are intermittently excreted in urine from the genitourinary tract and hence cannot achieve infective load in genitourinary tissue. Also, the high concentration of HRZE that pass out in urine partly explains the effectiveness of SCC.

CORRESPONDENCE TO

Dr. Deborshi Sharma Department General Surgery Institute of Medical Sciences Banaras Hindu University Varanasi – 221 005, India Tel. No. : 91-542-2307507, 2307510 Fax : 91-542-2368163 E-mail : deborshi_sh@yahoo.com

References

1. Amir - Zargar, YAVANGI. Primary tuberculosis of glans penis: a case report Urology Journal, 2004 Vol. 1, No.4, 278 - 279, Autumn.
2. Murthy SC, Udagani MM, Kajagar BM. Tuberculosis epididymo-orchitis and papulonecrotic tuberculids of the glans penis. Indian J Dermatol Venereol Leprol 2003; 69 : 408 - 410.
3. Angus BJ, Yates M, Conlon C, Byren I. Cutaneous tuberculosis of the penis and sexual transmission of tuberculosis confirmed by molecular typing. Clin Infect Dis. 2001 Dec 1; 33 (11) : E132-4.
4. M Vijaikumar, Devinder Mohan Thapa, P K Kaviarasan. Papulonecrotic tuberculide of the glans penis. Sexually transmitted infections 2001, (77): 147
5. Christopher G French MD, Liam Hickey, and David G Bell, MD, FRCSC. Caseating Granulomas on the glans penis as a complication of bacilli - Calmette - Guerin Intravesical Therapy. Rev Urol 2001 Winter; 3 (1) : 36 - 38.
6. Dahl DM, Klein D, Morgentaler A. Penile mass caused by the newly described organism Mycobacterium Celatum. Urology 1996 Feb; 47(2): 266-8
7. Anoop UC, Paucithran U. Genital Tuberculosis. Ind J Dermato venerol leprol 2002; 68: 164-165
8. Ui Yong Shin, Hyun Jun Park. Role of endourologic management of tuberculous urethral strictures. J of Endourology Dec 2002, Vol 16(10) 755-758.

Author Information

Deborshi Sharma, MS, FMAS
Lecturer, Department of General Surgery, Institute of Medical Sciences, Banaras Hindu University

Tetraj Panray Ramchuran, MBBS
Resident, Department of General Surgery, Institute of Medical Sciences, Banaras Hindu University

Md Kaif, MS
Resident, Department of General Surgery, Institute of Medical Sciences, Banaras Hindu University

Amrita Ghosh, MD,DNB
Lecturer, Department of Pathology, Institute of Medical Sciences, Banaras Hindu University

Puneet, MS
Lecturer, Department of General Surgery, Institute of Medical Sciences, Banaras Hindu University

V.K. Shukla, MCh
Professor & Head, Department of General Surgery, Institute of Medical Sciences, Banaras Hindu University