



TUBERCULOSIS OF GLANS PENIS - A RARE PRESENTATION

KOTESHWARI PS PALANISINGARAM

Department of General Surgery, MADURAI MEDICAL COLLEGE AND HOSPITAL

Abstract : Tuberculosis (TB) of penis is a very rare entity, even in developing countries. 57 year old male patient presented to us with ulcerative growth over glans penis and was diagnosed as carcinoma penis, however biopsy of the lesion showed evidence of tuberculosis which was supported by chest X- ray.

Keyword : Tuberculosis of glans penis, Secondary tuberculosis.



Fig 1



Fig 2

INTRODUCTION:

An extremely rare form of genitourinary tract tuberculosis is TB of glans penis.¹ It presents as lesions on glans penis or shaft of penis and may mimic malignant disease, ulcer or a nodule. We report a case of secondary tuberculosis of glans penis to our knowledge the first case from our hospital.

CASE REPORT:

A 57 year old male patient presented with complaint of ulcerative growth over his glans penis for duration of six months. It initially started as a small ulcer over dorsal aspect of glans penis measuring around 0.5*0.5 cm. It was associated with pain, dysuria and burning micturition. There was no history of trauma, surgery, weight loss, fever, cough or other constitutional symptoms. Previous history of Anti-tuberculous therapy (ATT) for two months was present.

According to positive culture from growth for staphylococcus aureus, patient was started on gentamicin and cephalexin, which gave some relief but there was no complete response. On physical examination, an irregular ulcero-proliferative growth of 3*3 cm was seen over both dorsal and ventral surface of glans penis [figure 1]. Urethral meatus was hidden by the ulceroproliferative growth [figure 2]. On palpation tenderness was present, edge and base was indurated. Rest of the genital examination was normal. Bilateral inguinal lymph nodes were enlarged, which were discrete, firm, mobile and non-tender. Patient had bilateral rhonchi and wheeze. Mucocutaneous examination was normal.

On investigation, complete blood count was normal. ESR was raised, it was 76mm/hr. Blood sugar, urea and creatinine were normal. Urine culture showed no growth. Patient was non-reactive for HIV ELISA. Dark field microscopy, TPHA and RPR for *Treponema pallidum* was negative. Tzanck smear for herpes simplex virus was negative. X-ray chest PA view showed left apical fibrosis suggestive of PTB sequelae. Sputum for AFB and tuberculin test were negative. CT abdomen and pelvis showed bilateral intra renal calculi, ulcerative lesion at the tip of penis without urethral involvement and few reactive inguinal nodes. Initial biopsy from the ulcerative growth showed only inflammatory cells. Repeat biopsy showed epithelioid cell granuloma and Langhans giant cells suggestive of tuberculoid granuloma. FNAC of the lymph node was non-specific. The patient was registered under RNTCP and put on anti-tubercular treatment, category-II, 2 H3R3Z 3E3S3 + 1 H3R3Z3E3 + 5 H3R3E3 H: Isoniazid-600 mg, R: Rifampicin-450 mg, Z: Pyrazinamide -1500 mg, E: Ethambutol-1200 mg, S: Streptomycin-500 mg. Within 2 weeks patient showed signs of healing.

DISCUSSION:

Tuberculosis is still a major cause of morbidity in developing countries like India but tuberculosis of the penis is very rare. Involvement of glans of penis was first described by Hellerstrom and later by Bafverstedt and Hagamen.²

TB of glans penis in adults is either primary or secondary. Primary TB of glans penis can be acquired by either intercourse with a patient suffering from genital TB, or contact with contaminated fabric.

The bacilli are inoculated into abrasions caused by vigorous sexual activity since normal mucosa is highly resistant to tuberculosis. Sometimes penile lesions may be caused by inoculation of the bacilli through his own infected ejaculate³. BCG vaccine induced primary tuberculosis of penis after immune-therapy for carcinoma urinary bladder are also reported⁴. The secondary form is due to the subsequent complication of lung tuberculosis or TB of other parts of urogenital tract extended through urethra or through haematogenous route. Tuberculosis of penis may affect the skin, glans penis or cavernous bodies. TB affecting the glans penis can be tuberculous chancre, papulo-necrotic tuberculid, tuberculosis cutis orificialis or tuberculous gumma. In most cases the lesion takes the form of an ulcer, which is difficult to differentiate from malignant tumors. The lesion can be extensive, with the involvement of urethra and corpus cavernosum. Young adults are predominantly affected. The female partner should always be evaluated for genital tuberculosis.

Rarely, it may present as a hardened nodule or papulo-necrotic tuberculide. Tuberculides are hypersensitivity reactions to *Mycobacterium tuberculosis* or its products in individuals with good immunity. Papulo-necrotic tuberculids are characterized by recurrent eruptions of asymptomatic, dusky red papules, which ulcerate, crust, and heal after a few weeks with varioliform scarring. Papulo-necrotic tuberculides are mostly extragenital. These occur symmetrically and predominantly over extensor aspects (legs, knees, elbows, hands and feet) of the extremities. Other areas that may be rarely affected are the ears, face, buttocks, and penis⁵.

CONCLUSION:

TB of glans penis is a rare presentation. This case is reported to increase awareness of this curable condition. Though incidence is rare tuberculosis of glans penis must be excluded if one presented with unhealthy non healing ulcer in penis. Histopathological examination is essential to differentiate it from Carcinoma penis. To determine whether a TB of glans penis is a primary or a secondary disease, intravenous pyelography and chest X-ray must be done. Anti-tubercular drugs are the mainstay of treatment.

REFERENCES:

1. Sekhon GS, Lal MM, Dhali JC. Tuberculosis of the penis. J Indian Med Assoc. 1971;56:316-8.
2. Jeyakumar W, Ganesh R, Mohanram MS, Shanmugasundararaj A. Papulonecrotic tuberculids of the glans penis: case report. Genitourin Med. 1988;64:130-2.
3. Dilip Kumar Pal, Anup Kumar Kundu, Subrata Chakraborty, Shikha Das. Tuberculosis of Penis: Report of two cases. Indian J Tuberculosis 1996;43:203-4
4. Sharma VK, Sethy PK, Dogra PN et al, Primary tuberculosis of glans penis after intravesical Bacillus Calmette Guerin immunotherapy. Indian J of Dermatol Venerol Leprol 2011;77:47-50.
5. Alka Dogra, sunil K Gupta, Anita Bansal, papulonecrotic Tuberculid of the glans penis-a case report. Journal of Pakistan Association of Dermatologists 2005;15: 285-287

