

## Dermatology

**KEYWORDS:** Intellectual disability, cytokine, neuregulin-1, polymorphism.

## MALE GENITAL TUBERCULOSIS (CUTANEOUS): AN UNUSUAL PRESENTATION



Volume-2, Issue-2, February - 2017

Wadhawa S.S

Resident, Dept of Dermatology & Venerology\*, BPKIHS, Nepal

Rijal A\*

Head & Professor, Dept of Dermatology & Venerology, BPKIHS, Nepal \*Corresponding Author arpanarijal@yahoo.com

### Article History

Received: 10.12.2016

Accepted: 21.01.2017

Published: 10.02.2017



### ABSTRACT:

An 18yr/Male, presented to the Dermatology OPD with multiple non-tender papules on the scrotum and penile shaft since one year. Six months ago he had multiple swelling in the inguinal region for which a manipulation was done outside. There were scars present in the supra-pubic region and also in the inguinal region. The papules ulcerated with a seropurulent discharge. Some of these papules coalesced to form a plaque with an extension up to the perianal region. On palpation the consistency of the plaque was soft and all lesions were non-tender. There was no history of anorexia, myalgia, fever, sexual contact, close contact with tuberculosis, discharge per urethra. We Report this case as tuberculosis of the scrotum and penis is less than 1% of all genital TB cases reported worldwide hence it can be missed, the diagnosis requires high index of suspicion and exclusion of other commoner genital infections. Treatment of the disease is by anti TB therapy which will completely resolve the lesion.

### Introduction:

Tuberculosis (TB) remains a major global health problem, specially in developing countries like India, Nepal, and TB of genitals manifests with a wide spectrum of clinical findings depending on the source of infection and the immune status of the host. Diagnosis is based on clinical manifestations, histopathological analysis, and demonstration of the relevant mycobacteria in tissue or in culture and host reaction to M. Tuberculosis antigen. Treatment is with standard multidrug regimens course and prognosis depend on the immune status of the host. Treatment is curative except for patients with a breakdown of the immune system. Tuberculosis may affect the whole male urinary and genital tract. Genitourinary TB (GUTB) is the second most common form of extrapulmonary TB (EPTB) in countries with severe epidemic situation of TB and the third most common form in regions with low incidence of TB. Male Genital TB is an important issue because if it is not diagnosed then it may lead to infertility. Testicular involvement usually is the result of direct extension from the epididymis and scrotal involvement suggests local extra testicular extension of the disease process. In prostate TB, hematogenous spread is more frequent than through the urinary system. Involvement of scrotal wall suggests local extratesticular extension of disease process. If the epididymal infection is extensive and an abscess formation occurs, it can rupture through the scrotal skin, thus establishing a permanent sinus.

### Case Report

**History & Examination:** An 18yr/Male, presented to the dermatology OPD with multiple non-tender papules on the scrotum and penile shaft since one year. Six months ago he had multiple swelling in the inguinal region for which a manipulation was done outside. There were scars present in the supra-pubic region and also in the inguinal

region. The papules ulcerated with a seropurulent discharge. Some of these papules coalesced to form a plaque with an extension up to the perianal region. On palpation the consistency of the plaque was soft and all lesions were non-tender.

There was no history of anorexia, myalgia, fever, sexual contact, or any close contact with tuberculosis, discharge per urethra



- Routine Investigations: The Routine investigations were normal like Total Count, Lymphocytes, Monocytes, Hemoglobin, Haematocrit, Platelet Count except ESR which was raised. Ziel Nelson stain of the discharge showed Acid Fast Bacilli (tuberculous).
- Mantoux test was strongly positive with an induration of 15mm.
- Serology for HIV was negative.
- VDRL was also Negative
- Chest X-ray was normal.

### Histopathology

The biopsy was done from the plaque and showed epitheloid granulomas consisting of Langhans giant cells, epitheloid cells and lymphocytes. Diagnosis: A diagnosis of tuberculosis was made based on and the patient was started on ATT. There was a marked improvement after one month of ATT. The patient was lost to follow up after that.

**Discussion:** Tuberculosis of skin is caused by M. Tuberculosis, M. bovis, and under certain conditions, Bacilli Calmette-Guerin (BCG), an attenuated strain of M. bovis originally developed for vaccination although

**Clinical Features:** Clinical Features Lesions occur on those areas exposed to trauma or infected sputum. The lesion starts as small,

symptomless, indurated warty papule. By gradual extension a verrucous plaque is formed. Irregular extension at the edges leads to a serpiginous outline with finger like projections. The centre may involute and form a massive infiltrated papillomatous excrescence. The colour is purplish, red or brown. The consistency is generally firm but there may be areas of relative softening. Pus may sometimes be expressed. At times the appearance is psoriasiform or keloidal. Occasionally exudative and crusted features are predominant [5-6]. Anomalous Forms Deeply destructive papillomatous form Sclerotic form Generalized Granulomatous form. In our patient, the clinical picture was a classical form of asymptomatic, slowly progressive hyperkeratotic plaque which was highly suggestive of cutaneous tuberculosis

### Differential Diagnosis

#### Genital Tuberculosis

#### Leishmaniases

Non tuberculous mycobacterial infections.

Prognosis The condition responds to antituberculous treatment, without it, extension is usually extremely slow and lesion may remain virtually inactive for months or years. Spontaneous remission often occurs. Active disease of other organs should be looked for, as osseous glandular or pulmonary tuberculosis may coexist. Our patient responded well to antitubercular therapy and there was significant improvement but patient lost to follow up after one month

**Conclusion:** We report this case for its unusual presentation, as the diagnosis requires high index of suspicion and exclusion of other commoner cause of genital infection. Asymptomatic, slowly progressing plaques should not be ignored and needs evaluation based on the possible differential diagnosis. Skin biopsy is a useful investigation for identifying and differentiating various important skin conditions. Tuberculosis of the scrotum and penis is less than 1% of all genital TB cases reported worldwide hence it can be missed another difficult challenges facing genital TB is emergence of a drug resistance strains which is an unavoidable phenomenon, majority of drug resistance is attributed to human behaviour, poor prescribing factors, lack of patient adherence. The potentiality of the skin to react in many different ways to a single organism is best illustrated in tuberculosis

### REFERENCES:

1. Grange JM, Noble WC, Yates MD, Collins CH. Inoculation mycobacterioses. *Clin Exp Dermatol.* 1988;13:211–20. [PubMed]
2. Irgang S Ulcerative cutaneous lesions in sarcoidosis. *Br J Dermatol.* 1955;67:255–60. [PubMed]
3. Iizwa O, Aiba S, Tagami H. Tuberculosis verrucosa cutis in a tumour like form. *Br J Dermatol.* 1991;125:79–80. [PubMed]
4. Wong KO, Lee KP, Chin SF. Tuberculosis of the skin in Hong kong. *Br J Dermatol.* 1968;80:424–9. [PubMed]
5. Gopinathan R, Pandit D, Joshi J, Jerajani H, Mathur M. Clinical and morphological variants of cutaneous tuberculosis and its relation to mycobacterium species. *Indian J Med Microbiol.* 2001;19:193–6. [PubMed]