# Case report

# Primary Tubercular ulcer in Glans Penis mimicking neoplastic lesion

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#### **Abstract**

Introduction

Tuberculosis is a very common disease especially in developing countries but primary tuberculosis of penis is extremely rare. Here we are presenting a case of Primary tuberculosis of glans penis of 82 years

Key Words: Primary Tuberculosis, Glans penis

More than 30% of the global population is affected by Tuberculosis (TB) and Eighty percent of all incident TB cases were found in 22 countries, with more than half the cases occurring in 5 Southeast Asian countries. The global case fatality rate was above 20% but exceeded 50% in some African countries with high HIV rates<sup>1</sup>. Extra-pulmonary tuberculosis is notorious for causing diagnostic difficulties, especially when present in the absence of proven pulmonary tubercular lesion. Tuberculosis may mimic neoplastic processes in various sites and still a major cause of morbidity in developing countries like INDIA, but tuberculosis of the glans penis is very rare. Till 1999, only 161 cases of penile tuberculosis were reported<sup>2, 3</sup>. The genitourinary (GU)tract is the most common site for extra pulmonaryTB, with the most frequently affected sites within the GU tract being the epididymis (42%), seminal vesicles (23%), prostate (21%), testes (15%) and vas deferens (12%) in males, and the fallopian tubes in females<sup>4,5</sup>.

In 1848, Fournier described the first case of penile tuberculosis<sup>6</sup>. In 1870 Soioweitschnik reported a next case of penile tuberculosis<sup>7</sup>.

### Case Report

A 82 years Hindu, married male from Chinsurah, Hoogly, West Bengal ,India presented with 1.5x1.5 cm ulcer in the glans penis covered with white slough with a punched out margin (fig-1). The skin was retractable . The shaft of the penis was indurated on dorsal aspect. At initial stage ulcer develop discrete & separate, then they coalesce to form bigger ulcer. Urethral opening was not distorted. Patient had local pain and discharge for about two and half months. The inguinal lymph nodes were not palpable. The general condition of the patient was unremarkable. He had no history of fever, weight loss or cough or urinary symptoms. No history of retention of urine or haematuria or local trauma and he performed his day to day activities. No improvement was noted on two months antibiotic therapy. The patient live in an area where tuberculosis is sporadically high and his family washer man had open type of tuberculosis

# **Investigations**

Routine investigation of blood shows R.B.C-Normocytic&Normochromic, Platelet-Adequate, TLC- Within normal limit, Haemoglobin -11.0 gm/dl, ESR- 40 mm/1<sup>St</sup> hour.

V.D.R.L- Nonreactive, HIV- Negative, Blood sugar (fasting)- 79mg/dl,

Blood sugar(PP)-109mg/dl, Blood urea- 29mg/dl, Serum Creatinine- 0.9mg/dl.

X-ray chest - NAD. KOH preparation from ulcer show no fungal spore or hyphae. On Gram staining

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Fig-I Showing ulcer in the glans penis

no specific bacteria identified (though the patient received antibiotics before gram staining).sputum A.F.B-Not Found.

Biopsy was taken from the ulcerated lesion .Base of ulcer covered with fibrin .Underneath fibro collagenous tissue infiltrated by lymphocytes and histocytes, presence of epithelioid granuloma. Z.N staining shows presence of Acid fast bacilli(fig-II). The patient was responded on three weeks of antitubercular drugsand the lesion was healed by six months.

# Discussion

The primary tubercular lesion in glans penis is rare. The primary cases can occur as a complication of ritual circumcision, during coital contact with the disease already present in the female gen-

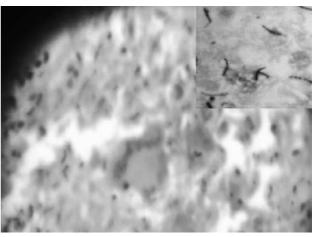


Fig-II-Photo micrograph showing tubercular granuloma with acid fast bacilli (inset)

ital tract, or even from infected clothing<sup>8</sup>. Several authors reported primary tuberculosis of penis either multiple lesion or after circumcision (table-1). The age of the patient maximum 63years as reported till date. Though the first case of penile tuberculosis was reported in 1848 but till 1946 only 110 cases were reported<sup>6</sup> and Lal et al observed report of 29 cases from 1946 to 1971<sup>9</sup>. From 1971-1992 only 16 cases were reported in literature<sup>10</sup>. Konohana et al<sup>11</sup> first report of a culture-positive penile tuberculosis lesion in 1992 in a 63-year-old Japanese man. Till date no case was reported in 82 years male. Single case report by different authors were observed in different literatures shown in table no1<sup>12-16</sup>.

Recently, the prevalence of TB in developing

Table -1 showing the few single case reports by different authors

Authors	Age of	Presenting features	Number of
	patient		cases
Jugal Kishore Kar, ManoranjanKar. (2012)	31 yrs	multiple non-healing ulcers over the glans penis	1
Hasan MZ, Khondker HH etal(12) (2011)	42yrs	presented with recurrent papule formation with little itching on glans penis	1
KishanChand, Chethan et al(13) (2010)	50yrs	presented to us with lesion on the glans penis and was diagnosed as Carcinoma penis	1
Sah SP, AshokRaj G, Joshi A.(14) (1999)	60yrs	multiple superficial ulcers on the glans penis.	1
Amir-zargar ma, Yavangimey al(15) (2004)	48 yrs	An ulcerative burgeon (granulated)	1
Present case	82 yrs	ulcer in the glans penis covered with white slough with a punched out margin	1

countries has had a declining trend <sup>17</sup>. Any ulcer in the penis must be excluded for tuberculosis whether provocative factors present or not. Tuberculosis of penis may affect the skin, glans or cavernous bodies. In most cases, the lesion appears as a superficial ulcer on the glans or around the corona. TB chancre is usually associated with supprative lymph node, which is not found in this case. This case may be a papulonecrotictuberculoid type of lesion. The importance of biopsy in the diagnosis of chronic genital ulcer is important to exclude neoplastic lesion and start of early man-

agement as well as to prevent spread of disease in the society.

# Conclusion

Though incidence is rare the primary tuberculosis of glans penis must be excluded if one presented with unhealthy non healing ulcer in penis at any age as the lesion can be completely cured by conservative treatment. It may lead to detection of tubercular lesion in the genital tract of female counter part thus reducing the social problem.

# References

- Dye C, Scheele S, Dolin P, Pathania V, Raviglione MC. Global Burden of TuberculosisEstimated Incidence, Prevalence, and Mortality by Country. *JAMA* 1999;
  282(7): p. 677-686.http://dx.doi.org/10.1001/jama.282.7.677PMid:10517722
- 2. SahSP, Ashok Raj G, Joshi A. Primary Tuberculosis of the glanspenis. *Australas J Dermatol* 1999;**40**:106-7 <a href="http://dx.doi.org/10.1046/j.1440-0960.1999.00332.x">http://dx.doi.org/10.1046/j.1440-0960.1999.00332.x</a> PMid:10333624
- 3. NathAK,JanakiramanSK,ChouguleA,Thappa DM. Penilepapulonecrotictuberculid: Revisited. *Indian J Dermatol* 2008;**53**:220-221 PMid:19882044 PMCid:2763768
- 4. Angus BJ, Yates M, Conlon C, Byren I. Cutaneoustuberculosis of the penis and sexual transmission oftuberculosis confirmed by molecular typing. *ClinInfect Dis* 2 0 0 1; **3 3**: e 1 3 2 4. http://dx.doi.org/10.1086/324360PMid:11692317
- 5. Barbagallo J, Tager P, Ingleton R, Hirsch RJ, Weinberg JM. Cutaneous tuberculosis:

- 6. Lewis EL. Tuberculosis of the penis: a report of 5 new cases, and a complete review of the literature. *J Urol* 1946; **56**:737–45. PMid:20279557
- 7. Brunati J. Anatomico clinical aspects of primary tuberculosis(chancre); differential diagnosis. *Ann Anal Path* 1938;**1** 5: 409-414.
- 8. Jugal Kishore Kar, ManoranjanKar. Primary Tuberculosis of the Glans Penis. *JAPI* 2012; **60:** 52-53.
- 9. Lal MM, Sekhon GS, Dhall JC. Tuberculosis of the penis. *J Indian Med Assoc* 1971; **56**:316–8.PMid:5093792
- 10. Brian J. Angus, 1 Malcolm Yates, 3 C. Conlon, 1 and I. Byren2Cutaneous Tuberculosis of the Penisand Sexual Transmissionof Tuberculosis Confirmed by Molecular Typing. Clinical Infectious Diseases 2001; 33:e132-4. http://dx.doi.org/10. 1086/324360PMid:11692317

- 11. Konohana A, Noda J, Shoji K, Hanyaky H. Primary tuberculosis ofthe glans penis. *J Am AcadDermatol* 1992; **26**:1002–3. <a href="http://dx.doi.org/10.1016/S0190-9622(08)80339-8">http://dx.doi.org/10.1016/S0190-9622(08)80339-8</a>
- 12. Hasan MZ, Khondker HH, Khatun M3, Talukder S.Primary Tuberculosis of Glans Penis: a Case Report. *Dinajpur Med Col J* 2011; **4**(2):100-101.
- KishanChand, Chethan, Vilas, A. P., Chethan, Anitha, Prasad, Seetharam. Primary Tuberculosis Of Penis Mimicking A Malignant Ulcer. *Internet Journal of Dermatology* 2010; 8(1):10
- 14. Sah SP, AshokRaj G, Joshi A. Primary tuberculosis of the glans penis. *Australas J*

- Dermatol 1999; **40**(2):106-7. http://dx.doi.org/10.1046/j.1440-0960.1999.00332.xPMid:10333624
- 15. A Karmakar, S Ghosh, N Dewasi, TK Ghosh. Bilateral tubercular abscess of breast in axillary tail in a 21 year old puerperal lady. Bangladesh Journal of Medical Science 2010; 10(1): 60-63. http://dx.doi.org/10.3329/bjms.v10i1.7323
- 16. Amir-zargar ma, Yavangi M, ja'fari m, Mohsenimj. Primary Tuberculosis of Glans Penis: a Case Report. 2004;1(4): 278-279.
- 17. Ueda H, Ohara H, Sakakibara T, et al. Tuberculosis of the contralateral adrenal gland: a case report. *Hinyokika Kiyo* 1985;**31**:449-56. PMid:4025081