

Primary Tuberculosis Vulva - A Case Report

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Abstract: A case of primary tuberculosis of vulva in a young female is presented herewith due to the rarity of the site and also since spread from no other structure could be found. [Agrawal R et al NJIRM 2013; 4(1) : 142-143]

Key Words: Female genital; Tuberculosis; Vulva

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Introduction: Tuberculosis of the female genital tract is a known entity especially in the tropics. It is usually secondary to a primary in the lungs or occurs as a descending infection via the fallopian tubes and endometrium. Vulval tuberculosis is very rare, and there were only few reported cases in the literature, mainly in developing countries. A case with primary in the vulva, an unusual site of tuberculosis is being presented herewith.

Case Report: A 32 years old hindu female presented with two non-healing ulcers over the lateral aspect of vulva since 2 years. Systemic antibiotics and topical creams prescribed to her by a local practitioner proved ineffective. She however gave a history of mild weight loss. She had no history of cough. Her menstrual history was unremarkable.

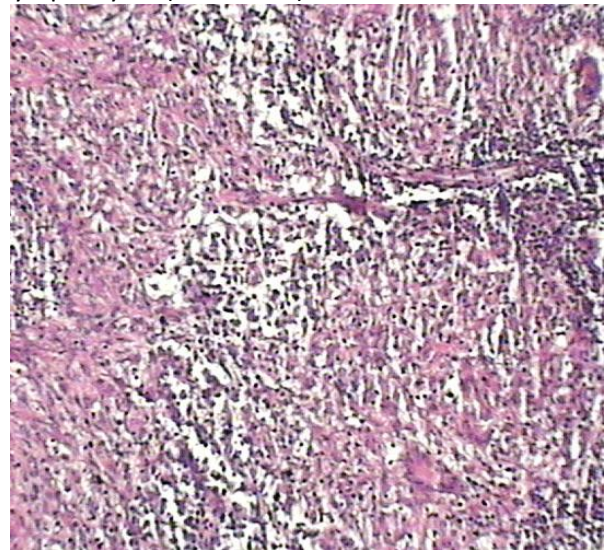
On general examination she was cachectic belonging to the middle socio-economic strata. The ulcers were about 2 x 1 x 0.5 cm in dimension with well-defined margins. The surface was irregular and yellowish. No regional lymphadenopathy or any other organomegaly was observed. Per vaginal and per-rectal examinations did not reveal anything significant. Chest X-Ray did not show any evidence of infiltration of lungs. Sputum AFB was negative. Endometrial curettings for histological examination and culture were negative.

Her investigations revealed a Haemoglobin of 8.6 g %, ESR 45mm by Wintrobe's method and TLC 9200 cells/mm³ with a differential of P50 L48 E01 M01. Rapid plasma reagin test was negative. Mantoux test was strongly positive with an induration of

more than 20mm. Chest X-Ray was normal. HIV screening test was negative.

A 5 mm punch biopsy from one of the ulcers was taken. Histopathological sections revealed multiple tubercles in the dermis composed of epithelioid cells, Langhans' giant cells, lymphocytic cuff and a central area of caseation (Fig.1). Modified Ziehl-Neelsen stain demonstrated few acid-fast bacilli (AFB) compatible with the diagnosis of vulval tuberculosis.

Fig. 1. Granuloma showing tubercles with epithelioid cells, Langhans' giant cells and lymphocytes (H&E x 400).



The patient responded well to anti-tubercular treatment. Four months after starting the therapy a repeat biopsy showed only few scattered and degenerating epithelioid cells and lymphocytes without any granuloma. AFB was negative. The patient after discharge from the hospital has been on regular follow up, and has remained well with

her general condition much better and gain in weight. The source of infection in this patient was not known as she had neither travel history nor any family history of tuberculosis. She was not immunocompromised. No evidence of genital tuberculosis or gonorrhoea was found in the husband.

Discussion: Genital tuberculosis is reported in 0.2 to 2.0% of all gynaecological cases, and in 1 to 2% of these the external genitalia are involved^{1,2}. Tubercular lesions of vulva may present as small shallow ulcers², multiple sinus tracts³ or rarely as elephantiasis of vulva¹. The usual presentations of symptomatic genital tract tuberculosis are infertility, abnormal vaginal bleeding, vaginal discharge, menstrual irregularities, abdominal pain or constitutional symptoms. Symptoms of pruritis, offensive discharge, dysuria, dyspareunia, and painful defaecation may be present¹. The lesions could be either hypertrophic or ulcerative, which again can be of lupus, scrofulodermal or painful tender ulcerative type⁴⁻⁷. Suppuration and ulceration of inguinal lymph nodes sometimes occurs and biopsy may be of diagnostic value. The presentation can be quite variable, and a vulval tubercular ulcer may be misdiagnosed as sexually transmitted disease like syphilis or chancroid^{3, 5}. A high index of suspicion along with a thorough histological examination usually provides the diagnosis.

Most authors agree that histological examination is one of the most useful current means of establishing diagnosis of genital tract tuberculosis¹⁻³. Microscopy of the vulval ulcer often reveals typical tubercles. Though diagnosis of tuberculosis should be based on demonstration of AFB, but there is universal agreement that the bacilli are very rarely found in female genital tract even with fluorescent techniques¹. The disease should be searched for in the urinary, gastro-intestinal, and pulmonary tracts, as in most cases the vulval condition is secondary to spread from other sites. It may arise by haematogenous spread, direct extension from the lesions in the genital tract or exogenously from sputum or sexual contact with a person harbouring epididymal or renal

tuberculosis¹. In children, the source of infection reported has been the fingers of the attendants or from the floor. The rarity of the primary form is due to the effective barrier raised by the squamous epithelium.

Radical surgery creates problems especially in non-healing wounds⁶. The optimal duration of treatment of vulval tuberculosis is not reported; however, the regime opted for non-pulmonary cases are usually followed.

Conclusion: It is re-emphasised that tuberculosis should be kept in mind when there is failure to respond to empirical treatment. After chemotherapy, the residual deformity should be corrected by surgical excision for good cosmetic results, especially when the patient is sexually active.

References

1. Agarwal J, Gupta JK. Female genital tuberculosis- A retrospective clinico-pathological study of 501 cases. *Ind J Pathol Microbiol* 1993; 36(4): 389-97.
2. Chatterjee G, Kundu A, Das S. Vulval tuberculosis. *Indian J Dermatol* 1999; 44:193-4.
3. Akhalghi F, Hamedi AB. Post menopausal tuberculosis of the cervix, vagina and vulva. *The Internet Journal of Gynecology and Obstetrics* 2004; 3(1).
4. Guruvare S, Kushtagi P. Genital tuberculosis manifesting as sinus tract. *The Internet Journal of Gynaecology and Obstetrics* 2007; 7(2).
5. Tripathi R, Prakash A, Rathore A, Saran S.: Vulval tuberculosis: an unusual case. *Acta Obstetrica et Gynecologica Scandinavica* 2003, 82 (8):769-769.
6. Tiwari P, Pal DK, Moulik D, Choudhury MK. Hypertrophic tuberculosis of vulva – a rare presentation of tuberculosis. *Indian J Tuberc* 2010; 57: 95-97.
7. Buppasiri P, Temtanakitpaisan T, Somboonporn W. Tuberculosis at vulva and vagina. *J Med Assoc Thai.* 2010; 93(5):613-5.

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