ATYPICAL PRESENTATION OF VULVAL TUBERCULOSIS

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Abstract:
A 25yrs old lactating women present with membranous lesion of the tongue, painful ulceration of mouth and vulva. The differential diagnosis of vulval ulcer includes various causes of acute vulval lesion usually associated with STD, malignancy and immunosuppressive disease. Later it is diagnosed as a case of vulval tuberculosis. This common lesion is often misdiagnosed, leading unnecessary investigations and treatment.

Introduction:
Female genital tuberculosis is a rare disease. According to Mathew (1949) genital tuberculosis is found in 0.2 to 2.0% of all gynaecological cases and in 1 to 2% of these the external genitalia are involved.[1,2,3] Tuberculosis more frequently affects the upper genital tract, namely the fallopian tube and endometrium. It usually occurs in women of childbearing age [1,4,5,6]. Tuberculosis of the cervix accounts for 0.1-0.65% of all cases of TB and 5-24% of genital tract TB.[2-12] Tuberculous lesion are either ulcerative or hypertrophic in the ratio of 10:1and a third type presenting as a nodule which breaks down to form a painful tender ulcer with undermined edges, a granulating base, and dirty yellow exudates.[1] The present case is of the latter type.

Case report:
A 25 yrs old multiparous, monogamous nursing women, living in a overcrowded area of Dhaka, presented with the complaints of unable to eat for 1month, painful oral and vulval ulcer for the same duration. Vulval ulcer slough out & bleeds intermittently. She also had excessive watery discharge from vagina .she gave history of similar type of oral ulcer one month back and cured by taking indigenous medicine.

On general examination, she was a frail poorly looking woman ,weighted 35 kg, tongue covered with adherent plaques, thick white coated, not removed when pushed with gauge (Figure 1), painful oral ulcer (Figure 2), blisters along the tongue margin (Figure 3) ,no lymphadenopathy, no joint pain and no other abnormality.

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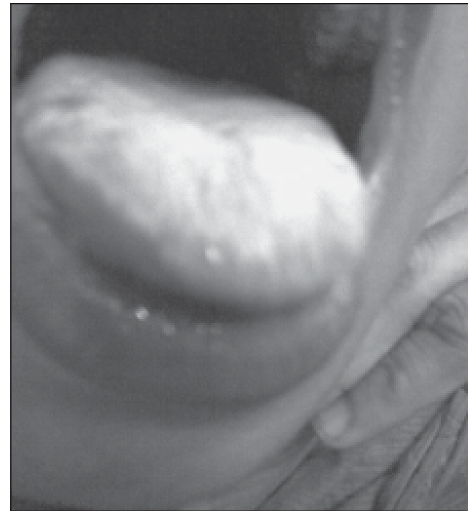

Fig.-1: *Coated tongue adherent plaque*

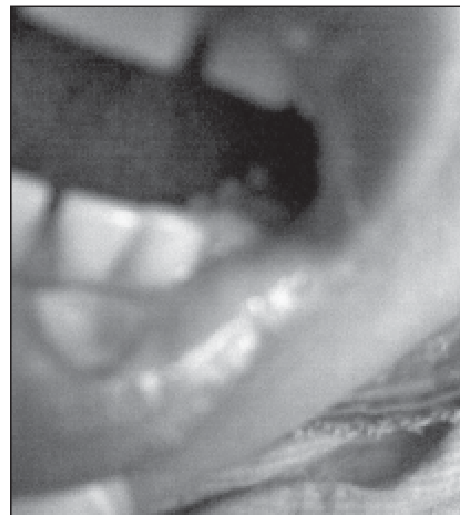

Fig.-2 : *Oral Ulcer*

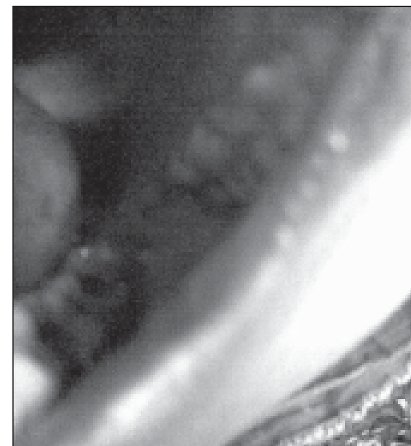

Fig.-3 : *Vlister along tongue margin*

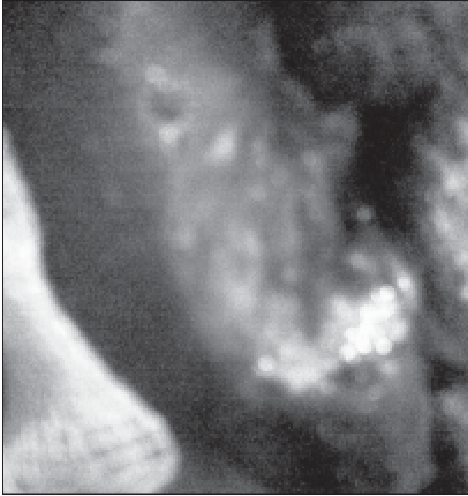

Fig.-4: *Vulval ulcer*

Lower end of the right labia majous contain a (3cmx3cm) large irregular shaped sharply punch out ulcer with loss of skin (Figure 4), looks angry, undermined edges , granulating base contain white slough, which was very painful and bleeds on touch . There is a tough white membrane coming out through the introitus which cannot be removed but causes excruciating pain on gentle traction. Introitus grossly inflamed and nodular appearance with intermingle vesicles, per vaginal examination was not possible (Figure 5).

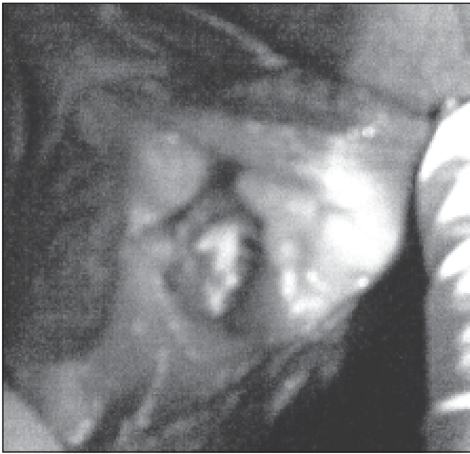

Fig.-5: *Vaginal membrane*

Her white blood cell count was$9x10^{10}$/L, neutrophils 62%,lymphocytes 29%,Monocytes 3%,eocinophil 6%, hemoglobin 10.2gm%,platelet count$326x10^{9}$/L, ESR 20,random blood sugar6.2m mol/L,VDRL,(both qualitative and quantitative)were nonreactive and not applicable. Serological test for treponema pallidum was negative.

She was treated with Inj. Ceftriaxone , Metronidazole, Fluconazole150mg orally, miconazole oral paste, Riboflavin but there was no improvement.

The preliminary diagnosis was Behcet's disease. The differential diagnosis was Fungal disease,STD related ulcer , HIV infection and malignant lesion . Her blood reports for HIV 1 and 2, HIV antibody were negative. Mantoux test and x-ray chest were unremarkable. She was treated with Doxycycline, ,oral acyclovir for herpes virus infection, Nystatin oral solution, oral ketoconazole ,vaginal antifungal drugs ,folic acid, rivoflavin and oral dexamethasone were added. Triamcilone oral paste improve oral ulcer but patient's condition deteriorates despite continued treatment. There after tissue biopsy was sent from the margin of the vulval ulcer and histological report confirmed glanulomatous lesion (Tuberculosis).Anti tuberculous quadruple therapy was initiated .Healing of the ulcer, with rapid relief of symptoms, followed four months Anti tuberculous chemotherapy.

Discussion:

Tuberculosis is one of the oldest diseases known to affect humans[13]. Female genital TB is a rare disease in some developing countries; it is a frequent cause of chronic pelvic inflammatory disease (PID) and infertility in other parts of the world [14]. Symptomatic genital TB usually presents with abnormal vaginal bleeding, menstrual irregularities, abdominal pain and constitutional symptoms [4,5,6,15,16].Pelvic organs are infected from a primary focus, usually the chest, by haematogenous spread [4,8,10,15,17] .The cervix is infected as part of this process ,by lymphatic spread or by direct extension. The vagina and vulva are rarely involved and its presentation can be variable[2,18].The primary lesion is often healed by the time of presentation [4-6,11,12,15-17,19] .Sputum used as a sexual lubricant, may also be a route of transmission. It is unusual for tuberculosis to involve the vulva and vagina. Some authors suggest the existence of primary genital tuberculosis which may be spread by venereal transmission. These lesions are extremely rare and usually present as isolated chronic ulcerative lesions of external genitalia in the absence of TB of the upper genital system.[20]

The differential diagnosis for vulval ulceration is extensive, ranging from infective causes, through inflammatory conditions to trauma. The ulceration may occur in isolation[18] or be part of a systemic disease, as seen in Behcet's syndrome. A careful history, nature of ulceration (solitary or multiple) and evaluation of the disease all go some way to limiting the differential diagnosis.

In a lactating woman with above history, the likely diagnosis is tuberculous ulcer.[2] The major infective causes were excluded in this patient. There were insufficient criteria for a diagnosis of Behcet's syndrome and there was never any evidence of skin lesions, eye inflammation and pathergy reaction.[21, 22, 23] Biopsy exclude the diagnosis of malignancy. The diagnosis of

vulval TB is usually made by histological examination of vulval biopsy specimen.[6,9,17] Staining for acid fast bacilli was not found to be very useful in making the diagnosis.[24] The detection of granulomata on vulval biopsy specimen [1,2,3,6,17] has been documented. Isolation of mycobacterium is gold standard for diagnosis. A third of cases are culture negative. Therefore, the presence of typical granulomata is sufficient for diagnosis if other causes of granulomatous vulvitis are excluded or primary focus identified.

Vulval ulcer may be misdiagnosed as sexually transmitted disease like syphilis or chancroids. A high index of suspicion coupled with a thorough histological review will usually give the correct answer, without biopsy patient may be maltreated or over treated for vulval malignancy. Radical surgery will create problem for non-healing wound. The optimal duration of treatment for vulval tuberculosis is not known. Most will follow the treatment duration of non pulmonary tuberculosis (6-9 months) .General condition of the patient, clinical condition of vulva may give a rough indicator for continuation or termination of Anti TB treatment.

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