# Behcet's disease simulating secondary syphilis in an HIV-infected patient

Sir,

Behcet's disease is a systemic vasculitis of unknown origin. In predisposed patients, bacterial or viral infection could trigger cross-reactive autoimmune responses resulting in Behcet's disease.[1] Occurrence of Behcet's disease in patients with human immunodeficiency virus (HIV) infection may be atypical and pose a diagnostic challenge. We describe a case of Behcet's disease occurring in HIV positive patient with false positive veneral disease research laboratory (VDRL) test.

A 32-year-old married female presented with multiple skin colored to erythematous painful papules and plaques over neck and shoulder. She also had history of recurrent oral and genital erosions and ulcerations, four to five episodes in 1-year duration which used to heal in a span of 2-3 weeks with treatment, details of which could not be found. The patient was also having moderate grade fever and joint pains, with difficulty in continuing her daily routine activities. Her spouse expired due to high-risk sexual behavior and chronic alcoholism.

On examination there were multiple erythematous, tender, infiltrated papulo-nodules coalescing into plaque predominantly over neck and shoulder [Figure 1]. Examination of the oral cavity showed multiple superficial erosions with surrounding rim of erythema over the hard palate

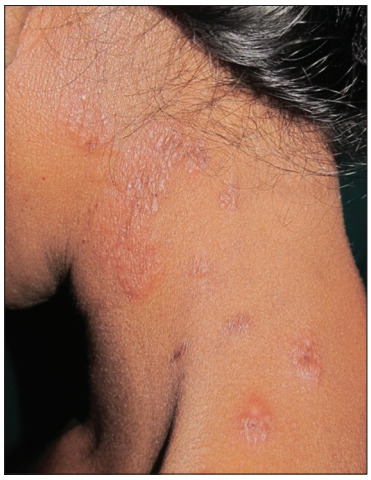

Figure 1: Multiple erythematous infiltrated papules and plaques over the neck

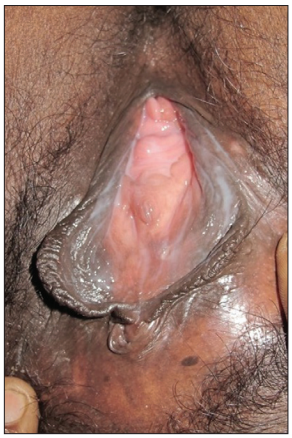

Figure 2: Single shallow erosion and few healed atrophic scars of previous lesions are seen over labia majora

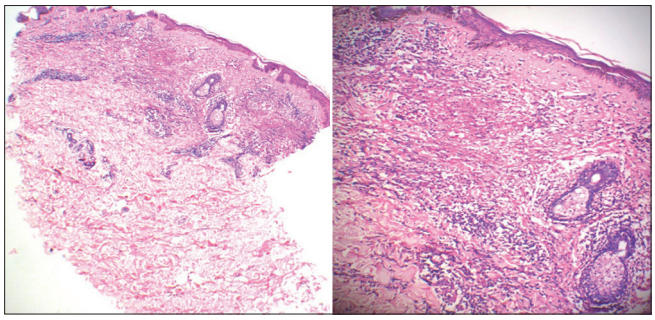

Figure 3: Normal epidermis with dense neutrophil predominant infiltrate in dermis, mild papillary dermal edema, and focal leucocytoclasia with extravasation of RBCs is seen. No true vascultis was seen. (H and E, ×40, ×100, respectively)

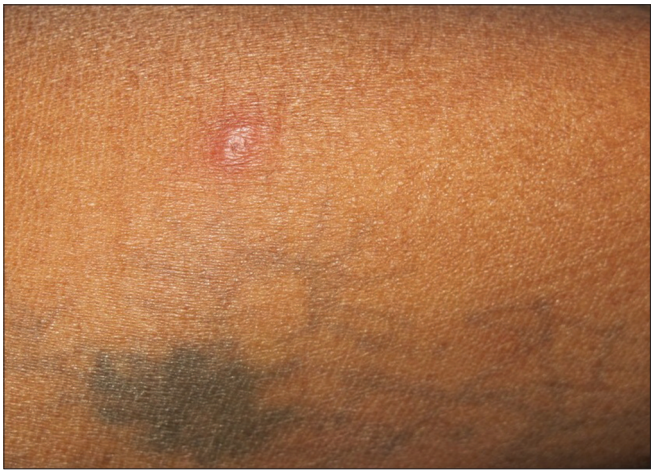

Figure 4: Edematous papulonodular lesion developed at site of needle prick on forearm suggestive of positive pathergy test

and gingiva. Genital examination revealed single erosion over labia along with multiple healed atrophic scars [Figure 2]. There were no other cutaneous or systemic signs or symptoms. Examination of the abdomen, lungs, and cardiovascular and central nervous systems showed no abnormality and ophthalmic examination was normal.

The differential diagnosis of Behcet's disease, recurrent herpes simplex, and secondary syphilis were considered.

Histopathological examination of a biopsy from one of the lesion over the neck showed dense neutrophilic collections in the dermis and peri-appendageal areas with mild papillary dermal edema and focal leucocytoclasia, suggestive of Behcet's disease [Figure 3]. In due course, she developed multiple papules at the sites of blood collection within 48 hours indicating positive pathergy test [Figure 4]. On investigations erythrocyte sedimentation rate was raised with 42 mm at the end of 1 hour. Her VDRL test was positive with 1:32 titer. However, trepenoma pallidum hemagglutination assay (TPHA) test was negative. The ELISA test for HIV was positive. The CD4 count was 342 cells/cumm.

The history of recurrent oral ulcerations (>5 episodes in 1 year), with recurrent genital ulcerations along with positive pathergy test fulfilled the International Study Group diagnostic criteria for Behcet's Disease.[2]

Based on above history and investigations a diagnosis of Behcet's disease in HIV patient was made.

Patient was treated with oral Dapsone 100 mg daily at night along with oral Colchicine 0.5 mg twice daily. Gradual resolution of skin lesions was seen with decrease in oral and genital ulcers over a period of 2 months. Patient was also referred for antiretroviral therapy (ART) and further investigations and management to ART center in

our institute. Unfortunately the patient was lost to follow-up.

Biological false positive VDRL test are seen in various conditions like, lupus erythematosus, lepromatous leprosy, infectious mononucleosis, malaria, viral hepatitis, relapsing fever, tropical eosinophilia, narcotic abuse, old age, malignancies and Behcet's disease with HIV infection as in our case.[3]

The occurrence of both Behcet's disease and HIV infection may be coincidental, a Behcet's-like presentation of the complications of HIV disease, or HIV infection causing or predisposing to a Behcet's-like illness. HIV-induced disturbances in the immune system may result in clinical or immunological findings usually associated with autoimmune diseases and increased susceptibility to certain viral infections.[4,5] Improvement of Behcet's disease with zidovudine and with triple drug ART has been reported.[5,6] In our patient, good response to dapsone and colchicine was seen. However, patient was lost to follow-up.

This case highlights both clinical resemblance to secondary syphilis and biological false positive VDRL test in a setting of HIV infection in a patient with Behcet's disease, creating diagnostic dilemma. Whether HIV infection or Behcet's disease is a cause of false positive VDRL can not be said in our case. Moreover, Behcet's disease was a presenting manifestation of HIV infection in our case. Thus, Behcet's disease may cause false positive VDRL; hence advised TPHA is advisable to confirm diagnosis of syphilis.

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