Herpes misdiagnosed as pyoderma gangrenosum

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Abstract
Retroviral infection is known to cause varied manifestation of any disease. We report a 27-year-old female who presented with non-healing painful ulcer in the left hand of 6 months’ duration. The patient was diagnosed as pyoderma gangrenosum and treated with immunosuppressant drugs. One month later, she developed perianal vesicles and Tzanck smear from the vesicles showed multinucleated giant cells. A workup for sexually transmitted disease revealed HIV 1 Elisa to be positive. Diagnosis of herpetic ulcer was made and treated with famciclovir and hand ulcer gradually healed in 25 days. We report this case to highlight the occurrence of herpetic ulcer in an unusual site in a HIV patient and may lead to misdiagnosis of pyoderma gangrenosum

Key words: Herpes, HIV, pyoderma gangrenosum

INTRODUCTION
Genital herpes is the most common sexually transmitted disease (STD) in HIV-seropositive individuals.[1] The severity of herpes infection increases in the presence of immunosuppression. Necrotic ulceration may appear at unusual sites and more extensive and chronic lesions may occur. Asymptomatic perianal HSV shedding is more commonly seen in HIV-seropositive individuals.[2] Chronic ulcers caused by herpes of more than 1 month duration are an AIDS-defining illness.

CASE REPORT
A 27-year-old female patient presented with non-healing painful ulcer in the left hand of 6 months’ duration. The lesion started as a pustule which evolved into an ulcer within 1 week. There was no history of trauma at the site. Fever and other constitutional symptoms were absent. On examination, an ulcer measuring 10 × 6 cm was present over the ulnar aspect of the dorsa of left hand which extended to the first three fingers and the palmar aspect of left hand [Figure 1]. The edges were sloping and the floor showed granulation tissue.

Investigation revealed anemia. Liver function, renal function, and chest X-ray were within normal limits. Mantoux, smear for AFB, KOH for fungus, and Tzanck smear were negative. Culture for tuberculosis and atypical mycobacteria were sterile. Fungal culture was negative. A biopsy of the ulcer showed neutrophilic vasculitis, necrosis, and ill-defined granulomas. The possibility of pyoderma gangrenosum was considered. P ANCA and C ANCA were also negative. HIV ELISA was not requested.

The patient was treated with sulfasalazine 500 mg twice daily. Oral steroids were added to the dose after 5 days as the lesions increased in size. She was discharged with T. prednisolone 20 mg daily. After 15 days, her ulcer did not show any improvement but pain was aggravated. Sulfasalazine was stopped. Cyclosporine 100 mg was advised and after 5 days she reported with vesicles and ulcers over perianal region.

On genital examination, multiple vesicles and ulcers with polycyclic border were seen in the perianal region and vesicles were present near the ulcer in the left hand. The blood picture showed pancytopenia. Tzanck smear from perianal vesicle...
showed multinucleated giant cells whereas from the vesicles on the hand showed only neutrophils. Pus culture showed staphylococcus and E. coli, and Linezolid 600 mg twice daily was started according to sensitivity pattern. A workup for STD revealed HIV 1 Elisa to be positive, and result was confirmed by Western blot. CD4 count was 65. She was treated with Famciclovir 500 mg thrice daily. She had dry cough for 3 days and chest X-ray showed patchy haziness on both sides. Early morning sputum for AFB was negative on three consecutive days. She was treated for Pneumocystis carini infection with co-trimaxozole. We planned to initiate antiretroviral drugs after her PCP treatment to prevent IRIS. Diagnosis of herpetic ulcer was made. After 5 days of famciclovir, her perianal lesions resolved and her hand ulcer showed some improvement with subsidence of pain. The ulcer over the hand healed in a span of 25 days [Figure 2].

DISCUSSION

Ulcerated herpetic lesions aid the sexual transmission of HIV. Atypical presentations of herpes such as hemorrhagic deep painful ulcers, vegetating plaque with ulceration, hyperkeratotic verrucous plaques, erythema multiforme, like eruption or generalized erythematous and papulovesicular rash, are found in HIV-affected individuals. In these cases Tzanck smear, biopsy, and viral culture will be helpful in confirming the diagnosis.

Herpetic infection of the hands usually presents as whitlow, erythema multiforme, or cellulitis.[3] Our patient presented with large herpetic ulcer in the hand which is uncommon. The most common site of shedding is the perianal region. Sub-clinical viral shedding is significantly common in HIV patients.[2] The probable reasons for the development of herpetic ulcer over the hand in our patient have been the transfer of herpes virus from the perianal region to the left hand and subsequent involvement of perianal region. Immunosuppressants might have facilitated perianal herpetic lesions.

Famciclovir in HIV-infected persons with genital HSV infection results in significant reduction in symptoms associated with HSV infection and the asymptomatic shedding of HSV.[4] Response to acyclovir is excellent except in few patients with very low CD4 count (<50). In such cases, recurrence rate is very high and treatment with higher doses for longer period is required.

Pyoderma gangrenosum presents as rapidly progressive, painful, suppurative cutaneous ulcers with edematous, blue, undermined, and necrotic borders. Ulcers due to arterial or venous disease, vasculitis, cancer, infection, and trauma can be misdiagnosed as pyoderma gangrenosum. Herpetic ulcer misdiagnosed as pyoderma gangrenosum has been reported.[5] A biopsy of an ulcerative variant of pyoderma gangrenosum demonstrates central necrosis and ulceration of epidermis, superficial dermal edema, and dermo-epidermal neutrophilic infiltrate with abscess. Vasculitis may be present. None of these histologic features are pathognomonic.

Pyoderma gangrenosum is a diagnosis of exclusion, and the misdiagnosis of pyoderma gangrenosum and its treatment can result in complications in patients who have other causes of severe cutaneous ulceration. Our patient was initially diagnosed as pyoderma gangrenosum and treated with immunosuppressive which might have prompted the increase in ulcer size and appearance of perianal...
vesicles and gave the clue to the diagnosis of herpes.

Chronic non-healing large ulcer mimicking pyoderma gangrenosum needs to have a thorough workup prior to initiation of immunosuppressants. Although screening for HIV was carried out, the initial omission of this investigation led to misdiagnosis of pyoderma gangrenosum in our case. Close long-term follow-up and workup are recommended for all patients with suspected pyoderma gangrenosum.

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