

The rare occurrence of cutaneous and mucosal lichen planus in HIV infection

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DESCRIPTION

A 36-year-old man, a rickshaw driver by profession, who was diagnosed with HIV infection 3 years back, was on regular antiretroviral therapy consisting of zidovudine, lamivudine and nevirapine. He presented with complaints of a pruritic rash on both his legs since 7 months, which started as a single lesion and gradually spread to the current state over the next 6 weeks. Barring his antiretroviral therapy, he did not have any other drug history. He did not consume alcohol, did not chew tobacco and did not smoke. His CD4-positive cell count at the time of presentation was 336/mm³, serology for hepatitis C virus and hepatitis B virus was negative and other laboratory parameters such as complete blood count, liver and renal function tests were normal.

On examination, he had polygonal, planar, purple papules over the anterior aspect of legs (figure 1), and also white lacy lines (with a reticular pattern) in the left buccal mucosa (figure 2), which were suggestive of Wickham striae.

Keeping in mind the oral and skin lesions, we considered the differentials as either lichen planus (LP) or lichenoid drug eruption due to zidovudine.

Our patient had Wickham striae, which is characteristic of LP, and has a good correlation to the histological features of the disease. He did not give consent for a skin biopsy.

This is a rare case, since there have only been few case reports of LP being seen in patients with HIV, and no specific prevalence has been mentioned.¹

LP is a cell-mediated immune response—the aetiology of which is unclear. It may be found in association with ulcerative colitis, vitiligo, dermatomyositis, myasthenia gravis, hepatitis C and primary biliary cirrhosis. Drugs like non-steroidal



Figure 2 Mucosal lesions of lichen planus (yellow arrow) (white lacy lines with a reticular pattern).

anti-inflammatory drugs, beta-blockers, methyldopa, penicillamine and quinidine have also been implicated.² LP usually affects middle-aged adults. The exact prevalence of LP is

Patient's perspective

I delayed going to the doctor thinking that it may just be a simple rash. With my condition, any new skin problem must be told to the treating doctor as soon as possible.

Learning points

- ▶ Cutaneous lesions in HIV-infected individuals should be evaluated in detail and not be ignored.
- ▶ The physician treating HIV-infected individuals should take detailed drug history from them and should also be aware of pathophysiology of lichen planus (LP).
- ▶ Patients infected with HIV, hepatitis B virus or hepatitis C virus should be educated regarding various dermatological manifestations of their condition and should report these to their treating physician during follow-up.
- ▶ Examination of the mucosa is important in patients with cutaneous features suggestive of LP, since the presence of Wickham striae is pathognomonic of the disease.
- ▶ Histopathological analysis reveals detailed features of LP, and direct immunofluorescence helps in differentiating between LP and other lesions that are difficult to differentiate clinically and histopathologically.



Figure 1 Cutaneous lesions of lichen planus (yellow arrows) (polygonal, planar, purple papules).



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unknown. Nevertheless, the estimated prevalence of LP is in the range of 0.22%–5% worldwide.³

The presence of Wickham striae on the mucosa is pathognomonic of LP; however, its absence does not rule out the disease. LP is diagnosed clinically with the features confirmed and differentiated from other lesions using direct immunofluorescence.

The pathogenesis of development of LP in an individual infected with HIV is probably due to the suppression of the CD4-positive cells in these patients. It could also be due to differences in antigenic presentation and altered immune response to antigenic stimuli in these immunocompromised patients.

Contributors PMS wrote up the case details and acquired the clinical photographs. VMD assisted in the discussion and looking up the necessary references.

Competing interests None declared.

Patient consent Obtained.

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