

Confluent Atypical Molluscum Contagiosum Causing Disfigurement in a Human Immunodeficiency Virus Patient

Dear Editor,

Molluscum contagiosum (MC) is a viral disease caused by molluscipoxvirus. The first peak incidence occurs in preschool children. A second peak incidence occurs in young adults in which the condition is generally considered to be a sexually transmitted disease. Though the disease is self-limiting and the lesions are usually small, discrete, pearly and dome-shaped with central umbilication, atypical and rare varieties could be found in some patients, in which the lesions may be large, confluent or non-umbilicated.

Case Report

A 60-year-old male patient presented to our department with complaints of painless multiple flesh-coloured papules and plaques on his body. They were located primarily on the eyelids, forehead, neck and extremities. Two years ago, he had numerous small, waxy, non-tender papules scattered all over his face and was misdiagnosed with vulvar syringomas, receiving laser treatment. In the following 2 months, the lesions increased gradually and had spread to the face, neck and extremities. Numerous papules on his eyelids

were large, coalescent and had joined together to form an enlarged structure of more than 3 cm in length, producing a unique appearance. As a result, his eyes could not fully open (Fig. 1). Small multiple lesions were non-tender with shiny skin nodules of up to 0.5 cm in diameter covering his face, neck and extremities, but these were less confluent.

Biopsy was taken from a nodule on the left eyelid. Histopathologic examination with haematoxylin and eosin (H&E) staining revealed a hypertrophied and hyperplastic epidermis. Above the basal layer, enlarged cells containing large intracytoplasmic inclusions suggestive of Henderson-Patterson bodies were indentified (Fig. 2). On investigation, the patient tested positive for human immunodeficiency virus (HIV) on the ELISA test. His white blood cell count was $3.64 \times 10^9/L$ with hypochromic and microcytic blood picture. The CD4 cell was 141 (9%). Total serum IgG concentration was 24.9 g/L, IgA 14.2 g/L, IgM 2.67 g/L.

Discussion

MC is a common benign, often self-limiting, cutaneous disease resulting from poxvirus infection. It often occurs



Fig. 1. Confluent molluscum lesions that covered the patient's eyelids, contributing to his disfigurement.

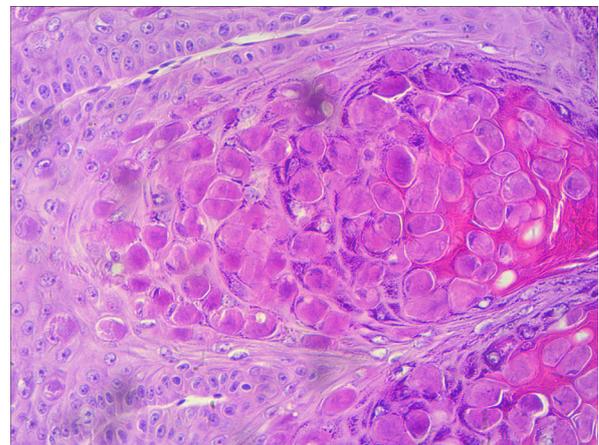


Fig. 2. Higher magnification showing intracytoplasmic eosinophilic structures – the so-called molluscum bodies (H&E stain x 400 magnification).

in children, sexually active adults and immunosuppressed patients, especially those with HIV infection. In HIV-positive patients, MC tends to occur during the advanced phase of the disease and signifies advancing immunosuppression. In one study, the prevalence of mucocutaneous findings in HIV-positive children with severe, moderate or no evidence of immunosuppression was 62%, 43% and 20%, respectively.¹ Among persons infected with HIV, the prevalence of MC has been reported to range from 5% to 18%,²⁻⁴ and is thought to be a clinical sign of marked HIV progression and very low CD4 cell counts. A study by Koopman et al⁵ on 72 patients with HIV reports on the prevalence of MC lesions in these patients and found that as many as 33.3% of them had low CD4 counts (below $100 \times 10^6/L$). In another study of 27 patients with HIV infection, the mean CD4 count was $86 \times 10^6/L$.⁶ There was also a statistically significant correlation between the CD4 cell count and extent of MC infection.^{6,7} Perez-Blazquez et al⁸ have proposed that in advanced HIV infection, MC lesions of the eyelid occur when the CD4 cell count lies below 80 cells/uL.

Classical lesions of MC are discrete, dome-shaped, umbilicated and waxy papules that are either skin-coloured or white. Lesions are usually distributed on the axillae, lower abdomen, sides of trunk, thighs and face. Uncommon sites include scalp, lips, tongue, buccal mucosa membrane, soles and eyelids. MC infection in HIV patients may present with pearly skin-coloured umbilicated papules. MC lesions that occur in acquired immune deficiency syndrome (AIDS) patients differ in size, site and morphology from those occurring in the immunocompetent. Lesions may resemble comedones, abscesses, furuncles, condylomas, syringomas, keratoacanthomas, ecthyma, sebaceous nevus, or cutaneous horn.⁹ Of importance is that disseminated fungal infections (specifically, cryptococcosis), *Penicillium marneffeii* infection and histoplasmosis are reported to clinically mimic MC^{10,11} and can also coexist in the same lesion.¹² Because of the atypical nature of molluscum in HIV-positive patients, diagnosis depends largely on biopsy.

In this case report, the morphology of the facial lesions was not immediately suggestive of MC. Complicating the diagnostic picture were the size, site and absence of a central umbilication. Although many studies state that HIV-infected patients may show MC all over the body, few cases show the atypical forms such as those found in this report.¹³ On biopsy, it was found that the patient had MC virus infection. Histopathological examination of the specimen from the skin lesions had played a crucial role in the diagnosis.

Conclusion

For clinically atypical lesions, a diagnosis of MC should be considered and these cases should be tested for biopsy in order to avoid misdiagnosis and guard against AIDS.

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