Resolution of giant *Molluscum contagiosum* with antiretroviral therapy

Sir,

Large-sized *Molluscum contagiosum* known as giant molluscum have been reported to occur in AIDS patients with low CD4 lymphocyte counts and they often present diagnostic difficulties. *Molluscum contagiosum* occurring in symptomatic HIV-infected patients are usually recalcitrant to treatment. We present here a case of multiple giant *Molluscum contagiosum*, showing excellent response to antiretroviral therapy (ART).

A 46 year-old unmarried laborer presented to the dermatology department with sessile, dome-shaped, dull red and mildly tender nodules on his forehead, varying in size from 6 mm to more than 2 cm (giant molluscum), present for the last one and a half years. The nodule in the center of the forehead was about 2.3 cm in diameter and had a crater-like depression [Figure 1]. There were smaller, nontender lesions on his cheek, nose, lower lip, trunk and scrotum. He had regularly visited female commercial sex workers for the last two years and had also had homosexual relationships with two males. He tested positive on two successive occasions for HIV with the use of the ELISA technique; his CD4 lymphocyte count was found to be 69 cells/mm^3. His ESR was 130 mm at the end of one hour and an X-ray of the chest was inconclusive. A biopsy showed lobulated epidermal hyperplasia displaying basophilic intracytoplasmic inclusion bodies. The patient was initiated on antiretroviral therapy (ART) with zidovudine 300 mg, lamivudine 150 mg and nevirapine 150 mg, all given twice daily. Nine months after starting ART, it was seen that the lesions on his trunk and genitalia had regressed. All the nodules on the forehead had disappeared leaving only hyperpigmented spots [Figure 2]. A blood test revealed his CD4 lymphocyte count to be 194 cells/mm^3. Two months later, there was no sign of recurrence.

Molluscum contagiosum occurring in HIV-positive patients may attain sizes greater than 10 mm and resemble tumors and deep fungal infection. In these patients, they are commonly extragenital.[1] Lesions are more common in those with homosexual practices than in those taking drugs via the intravenous (IV) route.[2] Our patient had genital lesions as well and was bisexual in nature. He categorically denied any IV drug usage.

Molluscum contagiosum in HIV infection is reliably diagnosed by skin biopsy. Giemsa stain of the material obtained from a crushed papule also demonstrates the presence of "molluscum bodies" in the cells of the epidermis. The usual histopathological picture shows eosinophilic molluscum bodies crowded into the cells of the spinous layer. Their staining pattern changes above the granular layer where they

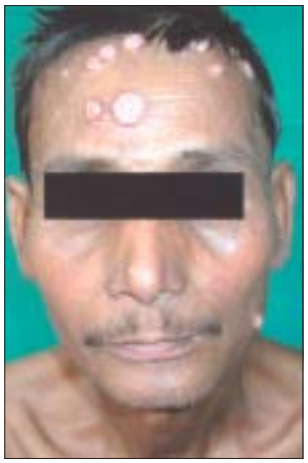

Figure 1: Multiple giant molluscum with central one showing crater like depression

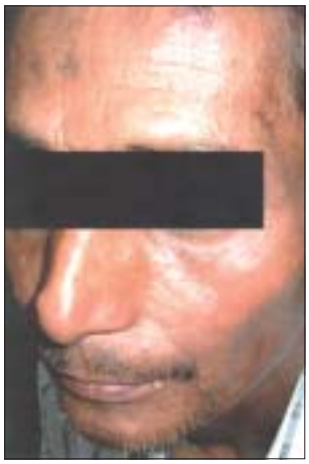

Figure 2: Nine months after HAART, showing disappearance of disfiguring giant *Molluscum contagiosum*

become basophilic, as seen in our case. Histological variants seen in immunocompromised patients are pseudocystic and polypoidal types.[3] These were not seen in our patient's biopsy.

Cidofovir (1-3%) cream or ointment[4] and electron beam therapy[5] have been used effectively to treat extensive lesions in the immunosuppressed but are not easily available. Facial mollusca of the giant type and especially those found in HIV-infected patients do not respond well to treatment. Intralesional interferon used in resistant facial mollusca[6] and topical imiquimod[7] were avoided as they were costly. Therapies targeted at boosting the immune system in the immunocompromised have proven to be most effective in such cases.[8]

Our case had a number of atypical and giant mollusca on the forehead in addition to genital lesions. Some of the lesions on the forehead mimicked keratoacanthomas. They responded satisfactorily when the primary disease was treated with HAART.

Sumit Sen, Parna Bhaumik
Department of Dermatology, North Bengal Medical College and Hospital, Darjeeling, West Bengal, India

Address for correspondence: Dr. Sumit Sen, Department of Dermatology, North Bengal Medical College and Hospital, Susrutnagar, District Darjeeling, West Bengal, India.
E-mail: drsumitsen@gmail.com

REFERENCES

1. Dhar S, Jain S, Verma G, Tanwar R. Disseminated and atypical *Molluscum contagiosum* in an AIDS patient. Indian J Dermatol Venereol Leprol 1996;62:331-2.
2. Raynaud- Mendel B, Janier M, Gerbeka J. Dermatologic findings in HIV-1 infected patients a prospective study with emphasis on CD4 + cell count. Dermatology 1996;192:325-8.
3. Mansur AT, Goktay F, Gunduz S, Serdar ZA. Multiple giant *Molluscum contagiosum* in a renal transplant recipient. Transpl Infect Dis 2004;6:120-3.
4. Calista D. Topical cidofovir for severe cutaneous human papilloma virus and *Molluscum contagiosum* infection in patients with HIV/AIDS: A pilot study. J Eur Acad Dermatol Venereol 2000;14:484-8.
5. Scolaro MJ, Gordon P. Electron beam therapy for AIDS related *Molluscum contagiosum* lesions: Preliminary experience. Radiology 1999;210:479-82.
6. Nelson MR, Chard S, Barton SE. Intralesional interferon for the treatment of recalcitrant *Molluscum contagiosum* in HIV antibody positive individuals: A preliminary report. Int J STD AIDS 1995;6:351-2.
7. Liota E, Smith KJ, Bukley R,Menon P, Skelton F. Imiquimod therapy for *Molluscum contagiosum*. J Cutan Med Surg 2000;4:76-82.
8. Hicks CB, Myers SA, Giner J. Resolution of intractable *Molluscum contagiosum* in a human immunodeficiency virus infected patient after institution of anti-retroviral therapy with ritonavir. Clin Infect Dis 1997;24:1023-5.