

TOPICAL STEROID ABUSE CAUSING GIANT AND DISSEMINATED MOLLUSCUM CONTAGIOSUM

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Sir,

Molluscum contagiosum is an infectious dermatosis caused by molluscum contagiosum virus of poxviridae family. Primarily young children, sexually active individuals and immunosuppressed persons are affected by this disease. It tends to be benign and self-limited in children and immunocompetent individuals. Atypical presentations like giant morphology and disseminated distribution are markers of immunodeficiency.⁽¹⁾

A seventy-nine-year-old female presented to our dermatology outpatient department with multiple asymptomatic papules and nodules over face, trunk, and extremities. Lesions appeared gradually over a period of 6 months. Few of them increased in size. Patient was applying halobetasol propionate ointment all over body for generalized pruritus for the past 5-6 years without any medical advice. There was no history of loss of appetite, weight loss or any symptoms pertaining to immune suppression. General and systemic examination did not reveal any abnormality. On cutaneous examination, there were multiple skin coloured to pearly white dome-shaped papules and nodules of variable sizes with central umbilication over face, neck, chest, upper extremities and retroauricular area (Figure 1a). The largest nodule measured around 2cm in diameter. Background skin of affected area showed generalized erythema, telangiectasia, thinning and ecchymotic patches suggestive of topical steroid abuse (Figure 1b, Figure 1c). Mucosae, hair and nails were normal. Fig 1a,b,c

Fig 2,3 Dermoscopy of the nodular lesion showed central whitish to yellow homogenous areas with surrounding telangiectasia (Figure 2). Routine haematological tests, liver function tests and renal function tests were within normal limits. Enzyme-linked immunosorbent assay for HIV was negative. Early morning serum cortisol was 17µg/dL. X-ray chest and spine and ultrasonography of abdomen and pelvis did not reveal any abnormality. Histopathology of the nodule revealed nests of squamous cells containing eosinophilic intracytoplasmic inclusion bodies (Figure 3). Based on clinical features, dermoscopy and histological findings a diagnosis of disseminated and giant molluscum contagiosum was made. Patient was advised to stop halobetasol. Larger troublesome lesions were treated with cryotherapy. Smaller lesions were treated with chemical cauterisation with phenol.

Disseminated and giant molluscum contagiosum has been reported in conditions of impaired cell-mediated immunity like HIV disease, haematological malignancy, idiopathic CD4 lymphocytopenia, sarcoidosis, hyper IgE syndrome.¹ There are reports of disseminated molluscum contagiosum in patients on methotrexate and other immunosuppressive therapy.² Children

on treatment with topical calcineurin inhibitors have also developed disseminated molluscum during therapy.³

In the past few years, there has been increased and inappropriate use of topical steroids without any medical advice. It is mainly due to potent anti-inflammatory actions of steroids that renders rapid symptomatic relief in many dermatoses. Several over the counter preparations containing steroids are often misused as fairness and anti-acne creams, resulting in alarming side effects. The topical steroid-induced adverse events are also on the rise.

Cell-mediated immunity plays an important role in protecting the host from viral infection. Cytotoxic T lymphocytes, natural killer cells (NK cells), anti-viral macrophages and cytokines like interferon gamma (IFN-γ) and tumour necrosis factor alpha (TNF-α) play a major role in first-line defence against viral infection. Besides inhibiting cells of innate immunity glucocorticoids inhibit expression of many cytokines like IFN-γ and TNF-α. Prolong use of topical steroid renders an individual immunosuppressed making him susceptible to infections and the risk is, even more, when potent steroids are used.⁴ The index case was applying high potency topical steroid all over body for a prolonged period that resulted in immunosuppression and consequently disseminated and giant molluscum contagiosum. On the literature search, we found only single case report of molluscum contagiosum following topical steroid use in 1971 by Hellier FF.⁵

As topical steroids are the most frequently used medication in dermatologic practice, its abuse is of matter of concern. Thorough patient education and appropriate use can prevent potentially harmful untoward side effects.

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Figure 1a: Dome shaped papules and nodules of variable sizes with central umbilication over face, neck, chest with back ground erythema and telangiectasia

Figure 1b: Generalized erythema, telangiectasia, thinning and ecchymotic patches suggestive of topical steroid abuse.

Figure 1c: erythema, telangiectasia, thinning and ecchymotic patches suggestive of topical steroid abuse.

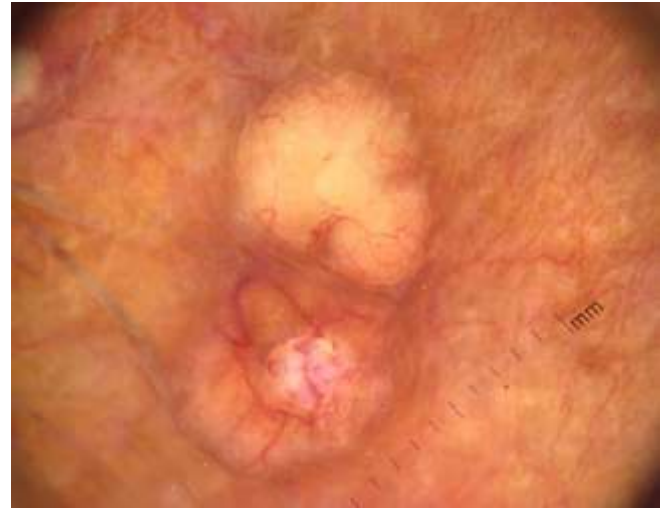


Figure 2: Dermoscopy of nodular lesion showing central whitish to yellow homogenous areas with surrounding telangiectasia (DL 3, contact polarized mode without interface fluid, x10).

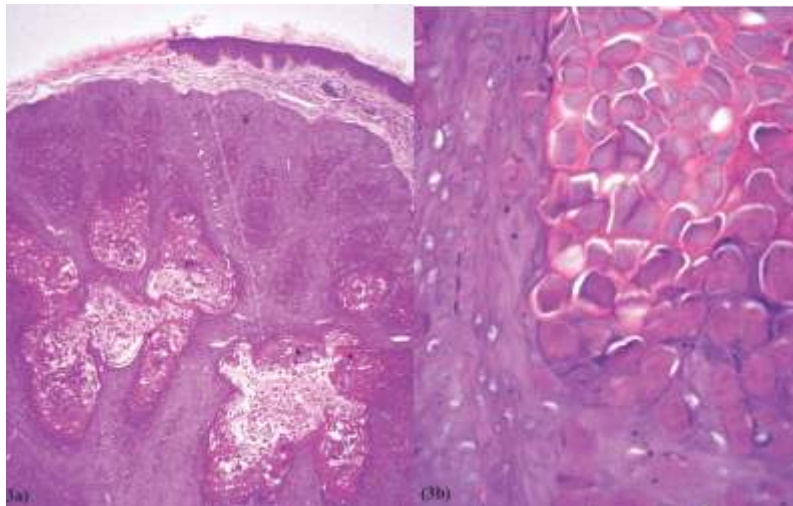


Figure 3a: Nests of squamous cells containing eosinophilic intracytoplasmic inclusion bodies (H & E, 10X).

Figure 3b: Large eosinophilic intracytoplasmic inclusion bodies (H & E, 40X).

