

Giant molluscum contagiosum in an immunocompetent child

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Abstract

Molluscum contagiosum is a skin disorder caused by DNA poxvirus and frequently seen in children. It is self-limited in immunocompetent hosts. It can present as numerous, treatment-resistant, atypical lesions in immunosuppressive patients and resistant to treatment. Atypical forms can rarely be seen in immunocompetent patients. A case of a two-year-old child with umbilicated papules on the eyelid is presented here. Laboratory investigations were unremarkable for systemic diseases, and surgical excision was successfully performed.

Keywords: Molluscum contagiosum, Poxvirus, Virus diseases.

Introduction

Molluscum contagiosum (MC) is a skin disorder that is caused by molluscum contagiosum virus (MCV1-4), subtype of poxvirus and frequently seen in children.^{1,2} It is characterised by 3 to 5 mm umbilicated papules that appear on the face, trunk, and extremities. The incubation period is around 2-3 months.²

Giant atypical MC lesions can be seen in patients with atopic dermatitis, those on corticosteroid or immunosuppressive therapy, sarcoidosis, leukaemia, Wiskott-Aldrich syndrome, and AIDS.³⁻⁵ The giant lesion is rarely seen in healthy individuals.

Few case reports with giant MC in immunocompetent individuals are reported in literature. Herein, we report a giant MC on the right eyelid in a healthy individual.

Case Report

A 2-year-old boy was admitted to our clinic for umbilicated papules around the right eye and on the right eyelid. He had progressively developed these lesions within one year. No similar lesion was detected in his family. His weight was 13kg, height was 87cm, and he was on the 50th percentile on the growth chart, and had

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Figure-1: Giant molluscum contagiosum on the right eyelid.



Figure-2: The macroscopic view of the resected specimens.

normal development. No malnutrition or nutrition deficiencies were detected. There was no history of frequent infections. The past medical history and family history were unremarkable.

Dermatological examination showed multiple (around

10), umbilicated and flesh-coloured papules, ranging in size from 2mm to 1.5cm, distributed on the face, particularly around the right eye and eyelid (Figure-1). Laboratory tests including routine biochemical tests, anti HIV, IgA, IgG, IgM and total IgE levels were unremarkable.

Cryotherapy was applied on the small lesions. Surgical excision was performed for the larger lesions around the eye (Figure-2). Histopathological examination of the lesion showed typical epithelial hyperplasia and intracytoplasmic inclusion bodies that were consistent with MC. Following the procedure, he was treated with thiocilline eye pomade (2 times a day), amoxicillin-clavulanate suspension (2 times a day) and ibuprofen suspension (2 times a day). During the one year follow-up, no new lesion was noted.

Discussion

MC is characterized by umbilicated papules that localise in the face, arms, legs and anogenital region, and is frequently seen in children and adolescents.^{1,2} The virus can directly enter into the epidermis from small skin defect, or indirectly through contaminated napkins, towels, or clothes.^{2,5} They can array separately, in groups or linearly.² The histopathological assessment of MC lesion showed epithelial hyperplasia, invagination, intracytoplasmic big and oval-shaped molluscoid inclusion bodies.⁵

Widespread, multiple MC lesions are more frequently seen in children compared to adults. However, facial and multiple site presentations, larger and atypical MC lesions with marked hyperkeratosis are more commonly seen in adult patients with HIV.^{2,3,5}

A giant MC is a rare nodular variant of MC with a diameter of more than 0.5-1cm.^{1,2} The giant variant can be a single lesion localising on the eyelid, scalp, or sole, and can easily be confused with basal cell carcinoma, verruca vulgaris, comedone, abscess, furuncle, condylome, keratoacanthoma, and various adenomas.^{6,8} The eyelid involvement of MC can cause chronic conjunctivitis.² Giant MC lesions are rarely seen in healthy individuals and are usually reported in patients with HIV and those on immunosuppressive diseases.^{2,3}

The diagnosis of MC is usually made based on clinical findings. A histopathological assessment is required in atypical variant cases. Topical or systemic treatments can

be applied in MC cases. Topical treatments include 10-20% potassium hydroxide, cryotherapy (applying liquid nitrogen for 6-9 seconds), trichloroacetic acid (35-100%), topical tretinoin and imiquimod, podophyllotoxin (20-25%), potassium hydrochloric solution (10-30% solution) or silver nitrate (40%). Systemic treatments include griseofulvin, methisazone (1-methylisatin 2-thiosemicarbazone), and cimetidine.^{5,9,10} Intra-lesional injection with interferon- α , 5-fluorouracil, bleomycin and surgical excision can be performed as well.^{8,9}

The medical treatment for the lesions around the eye is challenging, therefore surgical excision can be required. Immunocompetent individuals usually develop millimetric umbilicated lesions, and rarely have giant lesions. The differential diagnosis should be done cautiously to rule out other lesions.

Conclusion

Few cases with giant MC in immunocompetent individuals have been reported in literature. It can be successfully treated with cryotherapy, surgical excision and followed with medical therapy, as demonstrated from our case.

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