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Giant form of Molluscum Contagiosum: A case report

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ABSTRACT

Molluscum Contagiosum (MC) is a common, viral skin infection characterized by small papules that are spread all over the body and is resolved spontaneously within a year. In this article we present a 65-year-old male, with an atypical appearance of MC. He presented to the clinics with complaints of progressively large and firm bumps that were persistent. Clinical skin examination showed multiple papules that were skin-colored, variable in size and mostly located on the face. The patient's clinical history was significant for uncontrolled diabetes. Skin biopsy was taken and revealed the presence of molluscum bodies within the epidermis. The patient was diagnosed with giant molluscum contagiosum and therefore was screened for an underlying immunodeficiency with negative results. He was treated with cryotherapy which resulted in a successful outcome.

Keywords: Molluscum Contagiosum, Giant, Immunocompromised

1. INTRODUCTION

Molluscum Contagiosum (MC) is a worldwide, self-limited, contagious viral infection caused by the MC virus, a double-stranded DNA virus in the Poxviridae family. It commonly affects children and young adults but can develop in any age group. It can spread by fomites, contact sports, swimming pool, and auto inoculation (touching a lesion, shaving and scratching) and sexual contact (when it occurs in the genital region). The typical MC lesion is an asymptomatic, firm, smooth, dome-shape skin-colored papule with central umbilication. It appears anywhere on the body except the palms and soles. The most common locations include face,neck, axillae, sides of the chest, genitals, and antecubital and popliteal fossae (Meza-Romero et al., 2019). Lesions are usually 3 to 5 mm in diameter and rarely more than 30 papules on one individual (Gottlieb & Myskowski, 1994). Pruritus may be present or absent. Other variants of the disease include molluscum dermatitis (eczematous lesion surrounding MC papule), inflamed MC (erythema and swelling of individual lesions) and Gianotti-Crosti like eruptions (Berger et al., 2012).

Molluscum lesions appear a few weeks after viral exposure, usually 2 to 6 weeks. The condition can last from several months to a few years, with an average of about one year. During this time, lesions may disappear spontaneously, and new ones can develop (Schaffer & Berger, 2016).

Diagnosis of molluscum contagiosum is generally made by clinical examination of lesions. However, analysis of biopsy specimens of lesions shows characteristic eosinophilic cytoplasmic inclusion bodies known as molluscum bodies or Henderson-Paterson bodies. Dermoscopic examination may show a characteristic central umbilication with polylobular, amorphous structures that are white to yellow in color (Meza-Romero et al., 2019). Treatment of MC includes use of physical ablation via curettage, electrocautery, cryotherapy, or manual extrusion of the central core by squeezing is considered to be first-line therapy. One study reported clearance of infection in 92.3% of patients after 15 days of ablative treatment (Villa et al., 2010). However, in HIV patients, destructive therapies may not be effective. Instead, other treatment option should be used, particularly in cases of giant, recalcitrant, or extensive molluscum infection that are often seen in immunocompromised patients. Chemical ablation such as cantharidin, trichloroacetic acid, phenol or podophyllin can also be used.

However, because of the low efficacy and high toxicity of these treatments, they are not commonly used.In addition to physician-administered physical and chemical ablation, there are other number of treatment options that may be self-administered by the patient such as podophyllotoxin 0.5% solution or gel, retinoic acid, imiquimod, Potassium hydroxide 5 or 10% solution, salicylic acid 16.7% and lactic acid 16.7%, 40% silver nitrate, ingenolmebutate 0.015% gel. Other therapies include pulsed dye lasers, intralesional injection with candida antigen and oral cimetidine. In immunocompromised patients with severe and refractory MC lesions Interferon alfa, cidofovir intravenous and topical cidofovir (1% or 3%) and HIV therapy have been reported to be effective (Meza-Romero et al., 2019).

2. CASE REPORT

A 65-year-old male, presented with asymptomatic, persistent, slowly progressing skin lesions on his face for more than one year. He is diabetic on oral hypoglycemic treatment, otherwise he is very healthy. Review of systems was unremarkable, and there was no family history of a similar case. Skin examination revealed multiple skin-colored, non-scaly papules, variable in size, and located on the face (Figure 1). There was no lymphadenopathy or hepatosplenomegaly. Differential diagnosis includes leprosy, sarcoidosis, cutaneous T-cell lymphoma, metastasis, rosacea, cryptococcosis, histoplasmosis, Penicillium marneffei infection, adnexal tumors, and Langerhans cell histiocytosis. Skin biopsy revealed presence ofmolluscum bodies (Henderson-Paterson bodies) in the epidermis (Figure 2). Complete blood count (CBC), liver enzymes, urea, creatinine were all within normal limits. ESR was normal, fasting blood glucose was 148mg/dL, HgA1C was 8%, and HIV serology was negative. Based on the clinico-pathological findings the patient was diagnosed to have giant molluscum contagiosum infection. He was treated with cryotherapy with successful results.

Figure 1 Multiple skin-colored non-scaly papules scattered on the face

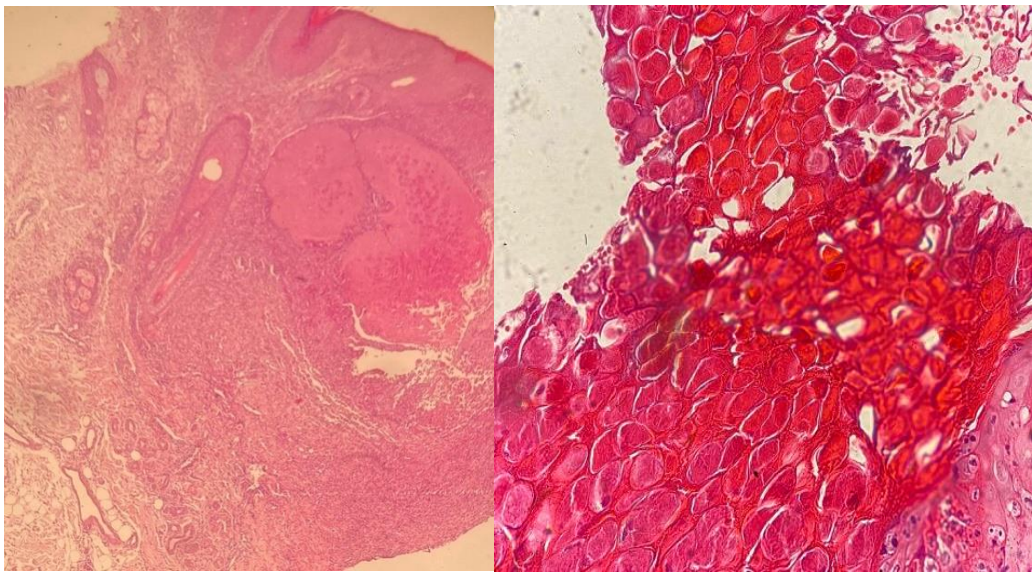

Figure 2 (a) Skin biopsy revealed presence of molluscum bodies (Henderson-Paterson bodies) in the epidermis. (b) Higher magnification

3. DISCUSSION

Viral skin diseases are one of the most common dermatological conditions seen in the clinics in Saudi Arabia, with MC being the second most common viral skin infection, preceded by viral warts as the most common infection (Al Thukair et al., 2017). MC is characterized by umbilicated papules that can occur most commonly on the face, extremities, and trunk in children, and a predilection for the groin and genitalia in adults. The virus is known to infect the epidermis through a defect in the skin causing papular eruptions seen most commonly in children compared to adults. However, extensive widespread lesions or giant lesions (>1 cm) are a typical presentations that are seen in immunocompromised patients (Meza-Romero et al., 2019).

In the present case report we describe an unusual case of giant MC in an elderly diabetic patient. While the typical size of MC papule varies from 3 to 5 mm, our case showed papules of > 2 cm in size. Therefore, an evaluation of an immunocompromised state is required in such cases. However, in our patient the hematological and chemical test were within normal limits, HIV serology was negative, and a blood sugar was controlled by his diabetic treatment. Such rare cases of giant MC in immunocompetent patients have also been reported in the literature. One case was an immunocompetent young adult with no drug history or systemic disease presented with an isolated giant MC, treated with total surgical excision (Uzuncakmak et al., 2016).

Another case was diagnosed as giant molluscum contagiosum in a 57-year-old immunocompetent female with history of chronic sunbathing (Agarwal et al., 2000). One article challenged the theory of truly immunocompetent patient developing giant MC. Speculating that all case reports of giant MC in immunocompetent patients were under investigated in regard to their immune status, considering a typical MC as a sign of an underlying immunodeficiency or may herald an immunodeficient state (Matsuda et al., 2005). However, there have been a case report of giant MC in immunocompetent patient who showed normal immune status after being screened for underlying immunodeficiency, suggesting that an atypical presentation of a giant MC can occur in immunocompetent patients (Hassan et al., 2014).

4. CONCLUSION

MC is a self-limited viral skin infection commonly affecting children and young adults. It is characterized by firm, smooth, dome-shape skin-colored papule with central umbilication. Most of the time it's diagnosed clinically; however histopathological findings help in confirming the diagnosis in patients with atypical presentation.

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Informed consent

Informed consent has been obtained from the patient

Authors' Contributions

1. Dr. Khalid A. Al hawsawi, Dermatology consultant, MD (Principal Investigator and corresponding author) - Abstract, introduction, case report, and discussion.
2. Eman M. Bamoosa, MD (Co-Author) - Introduction, case report, discussion and conclusion
3. Malak F. Alshaebi, MD (Co-author) - Abstract, case report and discussion

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Conflict of Interest

The authors declare that there are no conflicts of interests.

Data and materials availability

All data associated with this study are present in the paper.

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