

## CASE REPORT

### A rare case presentation of molluscum contagiosum over palms

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#### ABSTRACT

Molluscum Contagiosum (MC) is a viral infection caused by molluscum contagiosum virus (MCV), a member of the poxvirus family. Since the elimination of smallpox, MCV remains the sole poxvirus causing significant human disease. It usually affects children, sexually active adults, and immunocompromised patients. Despite being commonly reported, the unique clinical manifestations of this disease make diagnosing it a complex task. We hereby report a case of a 55-year-old male post renal transplant on immunosuppressive agents for several years presenting with multiple large lesions of molluscum contagiosum on both palms.

**KEYWORDS:** Molluscum contagiosum, pox virus, renal transplant, plams, Immunocompromised

#### INTRODUCTION

Molluscum Contagiosum (MC) is a common, self-limiting skin and mucous membrane infection caused by the molluscipox virus, a poxvirus family member. It spreads via direct contact, touching contaminated objects, or self-inoculation, resulting in dome-shaped, skin-colored, usually painless papules. While it's often seen in children and sexually active adults with healthy immune systems, immunocompromised individuals can have more and symptomatic lesions. In most instances, the clinical manifestation of molluscum contagiosum is sufficient for diagnosis. However, histopathological examination can serve as a supportive tool for diagnosis for cases that aren't readily identifiable through clinical observation.

#### CASE REPORT

A 55-year-old male underwent a renal transplant in July 2016 and has been on tablets prednisolone, capsule tacrolimus, and tablet Mycophenolate Mofetil for the past several years. Around three months ago, he noticed multiple elevated lesions appearing on his left palm. Over time, these lesions spread to involve the palms of both hands. The discomfort caused by these lesions, especially when pressed or rubbed, prompted him to visit our dermatology outpatient department (OPD).

On physical examination, multiple skin-color papules of varying sizes were discretely distributed across both palms. Additionally, some of these papules exhibited perilesional erythema and hyperpigmentation. (Fig. 1) Based on the clinical examination, palmar wart and mollus-

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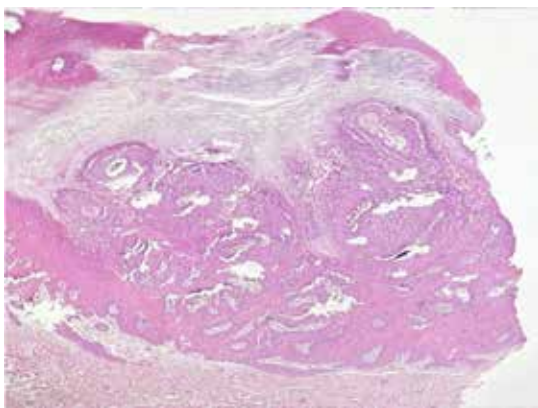
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cum contagiosum were kept as differential diagnosis.

A punch biopsy was performed on one lesion to confirm the diagnosis using a 3 mm biopsy punch. The histopathological examination revealed the presence of inverted lobules of hyperplastic stratified squamous epithelium. These lobules extended from the epidermis down to the underlying dermis, as shown in (Fig. 2). In addition to this, large intracytoplasmic eosinophilic inclusion bodies, commonly known as molluscum bodies, were identified. An inflammatory infiltrate was also observed, as depicted in (Fig. 3).



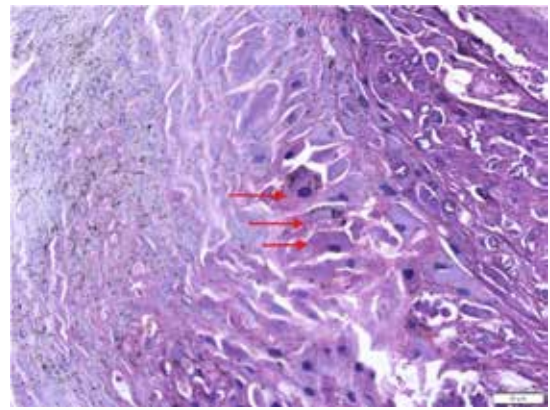
**Fig. 1** Multiple skin-coloured to hyperpigmented papules of varying sizes present over palm of both hands



**Fig. 2** Hyperplasia and lobulation of the epidermis toward the dermis (haematoxylin and eosin stain 4x)

## DISCUSSION

Molluscum contagiosum is caused by molluscum contagiosum virus (MCV), a double-strand DNA virus which belongs to the Poxviridae family;



**Fig. 3** Intracytoplasmic inclusion bodies (red arrows) (haematoxylin and eosin stain 100x)

humans are MCV only host. Molluscum contagiosum was first described by Bateman in 1817.<sup>1</sup> It is characterized by single or multiple papular or nodular lesions on the skin and mucous membranes. Molluscum contagiosum commonly affects children, sexually active adults, and those with compromised immune systems.

In children, the infection primarily targets exposed skin areas such as the trunk, extremities, intertriginous regions, genitals, and face, excluding the palms and soles.<sup>2</sup> In adults, lesions are most commonly observed in the lower abdomen, thighs, genitals, and perianal area, with the majority of cases being transmitted through sexual contact.

For immunocompromised individuals, Molluscum contagiosum is commonly found in HIV patients. It is estimated that the prevalence of molluscum contagiosum in HIV patients is close to 20%.<sup>3</sup> Renal transplant recipients are at an increased risk of viral skin infections due to the effects of iatrogenic immunosuppression.<sup>4</sup> Although Molluscum contagiosum lesions have been observed in this population, the frequency of molluscum contagiosum appears to be low. For instance, in a group of 197 renal transplant patients, only two cases of molluscum contagio-

sum were reported.<sup>5</sup>

Molluscum contagiosum, a highly prevalent infection, rarely occurs on the palm, regardless of age. The reason for its infrequent appearance on palms, unlike the papilloma virus, remains unknown. One possible explanation could be the thickness of the stratum corneum on the palms and soles, which might hinder the entry of the poxvirus, as it is significantly larger than the human papilloma virus. Palm involvement also shows that the virus replicates in the keratinocytes and does not require hair follicles. The first reported case of palm involvement was by Legrain and Pierard in 1985, and only a handful of cases have been documented since then.<sup>6,7</sup> We are reporting an unusual case of multiple large molluscum contagiosum over palms in a post renal transplant patient on immunosuppressive agents for several years.

## REFERENCES

1. Bateman F. Molluscum contagiosum. In: Shelley WB, Crissey JT, (Editors). *Classics in Dermatology*, Springfield, IL: Charles C Thomas; 1953. p. 20.
2. Schaffer JV, Berger EM. Molluscum contagiosum. *JAMA Dermatol.* 2016; 152(9):1072.
3. Czelušta A, Yen-Moore A, Van der Straten M, Carrasco D, Tyring SK. An overview of sexually transmitted diseases. Part III. Sexually transmitted diseases in HIV-infected patients. *J Am Acad Dermatol.* 2000; 43(3):409-32.
4. Au WY, Lie AK, Shek TW. Fulminant molluscum contagiosum infection and concomitant leukemia cutis after bone marrow transplantation for chronic myeloid leukemia. *Br J Dermatol.* 2000; 143:1097-98.
5. Garrido PMC, Borges-Coşa J. Skin disorders in renal transplant recipients: a retrospective study. *An Bras Dermatol.* 2017; 92(5):638-41.
6. Legrain A, Pierard GE. Molluscum contagiosum may affect primarily the epidermis without involving hair follicles. *Am J Dermatopathol.* 1985; 7(2):131-32.
7. García-Montero P, Serrano-Pardo R, Ruiz-Rodríguez R, Sánchez-Carpintero I. Molusco contagioso palmar, una localización excepcional. *Actas Dermosifiliogr.* 2019; 110:615-17.