# Atypical Presentation of Molluscum Contagiosum Mimicking Basal Cell Carcinoma in a 60-Year-Old Female:

# A Case Report

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#### **ARTICLE INFO**

#### **ABSTRACT**

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Molluscum contagiosum (MC) is a common skin infection caused by the molluscum contagiosum virus (MCV), a member of the family Poxviridae. It commonly affects the face, trunk, extremities and genetalia. However, involvement of other anatomical locations might be observed rarely. Clinically, it presents as small, dome-shaped, pink-colored, waxy papules, typically 1-5 mm in diameter, with a hallmark central umbilication. While most cases occur in children and immunocompromised individuals, atypical forms may arise in various populations, sometimes mimicking neoplastic skin lesions (such as basal cell carcinoma (BCC) and squamous cell carcinoma) or other dermatoses. These unusual presentations can pose significant diagnostic challenges, particularly in older adults where clinical suspicion for malignancy is heightened and histopathological evaluation is required. While diagnosis is typically clinical, based on lesion morphology, histopathological examination reveals characteristic molluscum (Henderson-Patterson) bodies—large eosinophilic cytoplasmic inclusion bodies within keratinocytes above the stratum basale, with nuclei displaced peripherally. This report aims to highlight the importance of considering MC in the differential diagnosis of solitary and atypical skin lesions, emphasize the role of biopsy and histopathological evaluation, and contribute to existing literature on the diverse clinical morphologies of this skin infection.

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### 1. Introduction

The viral infection Molluscum contagiosum (MC) is a self-limiting cutaneous condition caused by the molluscum contagiosum virus (MCV), a DNA virus in the Poxviridae family (1). It is commonly diagnosed based on clinical features—dome-shaped, pearly papules with central umbilication (2)—primarily affecting children and sexually active or immunocompromised adults (3). However, MC can occasionally present atypically, particularly in elderly or immunocompetent adults, mimicking other dermatological conditions including neoplasms such as basal cell carcinoma (BCC), keratoacanthoma, or even squamous cell carcinoma.

Histopathological evaluation is considered the gold standard in cases where clinical diagnosis is unclear. Characteristic features of MC include lobular epidermal hyperplasia and eosinophilic intracytoplasmic inclusions—Henderson–Patterson bodies—within keratinocytes (4).

# 2. Case Report

This case describes a 60-year-old female presented to the dermatology clinic with a 2-month history of a solitary, enlarging lesion behind the left ear. The lesion was painless, non-pruritic and no discharge is seen. The patient had an unremarkable previous medical history, with no immunosuppressive conditions, and no systemic symptoms. She had no similar lesions elsewhere on her body.

The clinical examination revealed a 7-mm dome-shaped nodule with a smooth surface located just behind the left ear. The nodule was firm, non-tender, and flesh-colored, with no surrounding erythema or ulceration. Based on clinical morphology and anatomical location, a provisional diagnosis of basal cell carcinoma was made.

An excisional biopsy was performed and sent to pathology lab to confirm the diagnosis. Histopathological analysis showed lobular hyperplasia of the epidermis with central craters filled with keratin and numerous large eosinophilic intracytoplasmic inclusion bodies within the cytoplasm of keratinocytes—Henderson–Patterson bodies— which are typical findings that confirms the diagnosis of Molluscum contagiosum (Figures 1, 2).



Figure 1: 10X magnification of the lesion showing epidermal hyperplasia and Henderson-Patterson bodies.

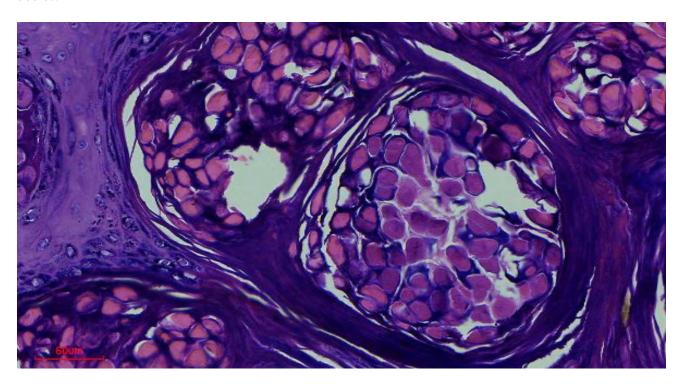


Figure 2: 20X magnification showing Henderson-Patterson bodies.



Given the solitary nature of the lesion and absence of symptoms, the patient was prescribed berdazimer topical, once daily for 4 weeks. At follow-up after the lesion site had regressed completely without scarring or recurrence.

# 3. Discussion

This case highlights a rare and clinically significant presentation of MC in an immunocompetent elderly woman, initially misdiagnosed as basal cell carcinoma. Though MC is predominantly observed in children (5), adult cases are not uncommon and can present atypically, particularly in less expected anatomical sites (6) such as the external ear.

The absence of typical central umbilication, which results from altered immune-mediated inflammatory responses or evolved lesion morphology that obscures typical features (7), along with the solitary nature of the lesion, all contributed to diagnostic challenge (6). Moreover, in older adults, the index of suspicion for skin malignancies is high, especially for lesions on sun-exposed areas like the ear —largely due to cumulative ultraviolet exposure and risk associated with increasing age (8). In such scenarios, biopsy is imperative to avoid misdiagnosis and unnecessary surgical intervention (4).

Histopathology remains the cornerstone for definitive diagnosis, as illustrated in this case. The presence of Henderson–Patterson bodies is diagnostic of MC (9) and helps distinguish it from BCC or other cutaneous neoplasms.

Treatment of MC is often unnecessary due to its self-limiting course. However, intervention may be considered in symptomatic, extensive, or cosmetically concerning cases (3) (10) Options include curettage, cryotherapy, cantharidin, and newer agents like topical berdazimer sodium, recently approved for MC treatment (3).

Through literature review, solitary MC lesion mimicking BCC in the auricular region is exceedingly rare and underreported. This case contributes to the expanding clinical spectrum of MC presentations and underscores the necessity of biopsy in atypical lesions.

# 4. Conclusion

This case emphasizes the importance of considering atypical presentation of Molluscum contagiosum in the differential diagnosis of solitary nodular lesions in elderly patients. Histopathological examination



remains crucial for accurate diagnosis in atypical cases. Awareness of such presentations can prevent misdiagnosis, unnecessary procedures, and ensure appropriate patient management.

#### **Disclosure**

The authors declared no conflicts of interest.

Written informed consent was obtained from the patient. According to institutional policy, this single case report was exempt from Institutional Review Board (IRB) review.

## References

- 1- Molluscum contagiosum: a review for healthcare providers. (2019, May 1). ResearchGate. https://www.researchgate.net/publication/341504870\_Molluscum\_Contagiosum\_A\_Review\_for\_He althcare Providers
- 2- Trčko, K., Hošnjak, L., Kušar, B., Zorec, T. M., Kocjan, B. J., Križmarić, M., Seme, K., Miljković, J., Luzar, B., & Poljak, M. (2018). Clinical, histopathological, and virological evaluation of 203 patients with a clinical diagnosis of Molluscum contagiosum. Open Forum Infectious Diseases, 5(11). https://doi.org/10.1093/ofid/ofy298
- 3- Meza-Romero, R., Navarrete-Dechent, C., & Downey, C. (2019). Molluscum contagiosum: an update and review of new perspectives in etiology, diagnosis, and treatment
  Clinical Cosmetic and Investigational Dermatology, Volume 12, 373–381. https://doi.org/10.2147/ccid.s187224
- 4- Histopathologic Finding and Pathophysiology Pathway of Moluskum Kontangiosum | Request PDF. (n.d.). ResearchGate. https://www.researchgate.net/publication/359791017\_Histopathologic\_Finding\_and\_Pathophysiology\_Pathway\_of\_Moluskum\_Kontangiosum
- 5- Takci, Z., Karatas, A., Bas, Y., Tekin, O., Kalkan, G., Seckin, H. Y., Akbayrak, A., Sezgin, S., Demir, O., & Takci, S. (2022). Demographic and clinic characteristics and risk factors of molluscum contagiosum in children. Journal of the Pakistan Medical Association. https://doi.org/10.47391/jpma.4829
- 6- Hebert, A. A., Bhatia, N., & Del Rosso, J. Q. (2023, August 1). Molluscum contagiosum: epidemiology, considerations, treatment options, and therapeutic gaps. https://pmc.ncbi.nlm.nih.gov/articles/PMC10453394/
- 7- Gaurav, V., & Grover, C. (2021). "Molluscum" conditions in dermatology. Indian Dermatology Online Journal, 12(6), 962–965. https://doi.org/10.4103/idoj.idoj 928 20
- Wang, R., Chen, Y., Shao, X., Chen, T., Zhong, J., Ou, Y., & Chen, J. (2025). Burden of skin cancer in older adults from 1990 to 2021 and modelled projection to 2050. JAMA Dermatology. https://doi.org/10.1001/jamadermatol.2025.1276
- 10- Obaid, A. H., Ali, S. H., & Mayea, N. A. (2024). Molecular epidemiology and histopathology study of molluscum contagious virus in patients with clinical lesions in Al-Qadisiyah province, Iraq. Clinical Epidemiology and Global Health, 28, 101631. https://doi.org/10.1016/j.cegh.2024.101631





11- Lacarrubba, F., Micali, G., Trecarichi, A. C., Quattrocchi, E., Monfrecola, G., & Verzì, A. E. (2022). New developing treatments for molluscum contagiosum. Dermatology and Therapy, 12(12), 2669–2678. https://doi.org/10.1007/s13555-022-00826-7