

Atypical Molluscum Contagiosum over the Breast in Pregnancy: A Case Report

Sujaya Manvi¹, Rajni Sharma²

¹Medical Officer, Civil Hospital, Palampur, District Kangra, Himachal Pradesh, India

²Senior Resident, Indira Gandhi Medical College, Shimla, Himachal Pradesh, India (Corresponding Author)

Abstract: *Molluscum contagiosum is an infectious viral disease of the skin or occasionally of the mucous membranes caused by a DNA poxvirus. The lesions typically present as asymptomatic 1mm to 5 mm pearly white or skin-colored round papules with an umbilicated center. The lesions frequently develop over the face, trunk and arms in children and over the genitalia in adults as sexually transmitted infection. Involvement of breast and areola is unusual for the molluscum contagiosum infection. Atypical presentations are rare and mostly seen in the setting of immunodeficiency although they may be seen in immunocompetent individuals. Here we present a case of atypical molluscum contagiosum over the breast in a pregnant patient resolving spontaneously after the biopsy.*

Keywords: molluscum contagiosum, immunodeficiency, pregnancy, atypical presentation

1. Introduction

Molluscum contagiosum is an infectious viral disease of the skin or occasionally of the mucous membranes caused by a DNA poxvirus. It is transmitted by person to person contact or fomites. The virus later may spread from the primary site to a distant site via autoinnoculation. The diagnosis is mainly clinical.^{1,2} Atypical presentations are rare and mostly seen in the setting of immunodeficiency.^{3,4} Here we present a case of atypical molluscum contagiosum over the breast in a pregnant patient.

2. Case Report

A 35-year-old female patient presented in the dermatology OPD with complaint of asymptomatic, reddish, raised lesions over the left side of the breast since last 7-8 months. The lesions had developed in the later half of pregnancy and the patient was lactating at the time of presentation. On examination, there were three well defined, round, pinkish, umbilicated, non-tender nodules of size ranging from 0.5×0.5cm to 0.7×0.7cm present in a horizontally linear pattern on the medial side of the left breast and areola. On palpation, there was no discharge or underlying swelling and no associated lymphadenopathy. Her medical history was normal. ELISA for HIV was negative. The biopsy report showed several rounded follicular infundibular epitheloid aggregates that have numerous pink molluscum inclusion bodies suggestive of molluscum contagiosum. On a follow-up visit 3 weeks later after the biopsy, the lesions had spontaneously resolved.



Figure 1: Non-tender nodules arranged in a horizontally linear pattern

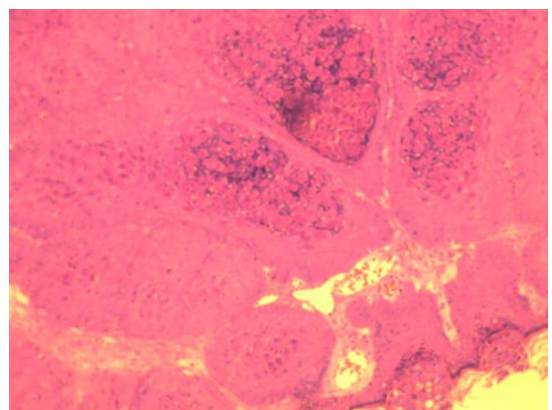


Figure 2: HPE showing molluscum inclusion bodies (10x)

3. Discussion

Molluscum contagiosum was first described in 1817 and its viral aetiology was determined by Juliusberg.⁵ It is caused by Molluscum contagiosum virus which is a DNA virus belonging to the molluscipox genus of the Poxviridae family. The virus infects epidermal keratinocytes.^{5,6} It mainly infects young children, sexually active adults and immunosuppressed individuals. The children frequently develop lesions over the face, trunk and arms. Adults may

develop lesions over the genitalia as sexually transmitted infection.⁶ The virus is mainly transmitted via direct contact with infected persons or contaminated objects such as towels, clothes or toys.¹⁻⁶ The lesions typically present as asymptomatic 1mm to 5 mm pearly white or skin-colored round papules with an umbilicated center. Histological evaluation of a lesion reveals large, intracytoplasmic inclusion bodies (molluscum bodies or Henderson–Patterson bodies) in epidermal keratinocytes.^{4,5,6}

Atypical clinical variants include giant lesions greater than 5mm, eczematous lesions, folliculocentric lesions with secondary abscess formation, molluscum without any umbilication, tender molluscum, and erythematous nodular types.^{3,4} These variants pose diagnostic challenges especially in the setting of immunosuppression especially in HIV infection. Immunocompetent patients develop atypical lesions due to hair follicle involvement and variable states of inflammation, including secondary abscess formation.⁴ A histopathological examination may be necessary to make a diagnosis in these cases.⁷

In our case, pregnancy which is an immunosuppressive state might have led to the atypical presentation. The development of the lesions in a linear fashion could be due to auto-inoculation. Involvement of breast area including the areola and the nipple is unusual for the molluscum contagiosum infection. There are only a few case reports of infection at this site and presentation has been atypical in most of these cases.⁶ The spontaneous resolution of the lesions after biopsy procedure may be attributed to autoinoculation which activates a delayed hypersensitivity response to the tissue antigens aiding in clearance of the lesions.²

To conclude, pregnancy which is an immunosuppressive state may lead to the atypical presentation of molluscum contagiosum. Atypical molluscum contagiosum can be difficult to diagnose and histopathological examination may be necessary to make a conclusive diagnosis.

References

- [1] Gupta S, Chaudhry M, Mahendra A, Kaur S. Eyebrow threading: A boon or a bane. *Indian J Dermatol* 2011; 56: 715-7.
- [2] Kachhawa D, Sonare D, Vats G. Autoinoculation as a treatment modality for molluscum contagiosum: A preliminary uncontrolled trial. *Indian J Dermatol Venereol Leprol* 2018;84:76-8.
- [3] Sen S, Goswami BK, Karji N, Bhaumik P. Disfiguring molluscum contagiosum in a hiv-positive patient responding to antiretroviral therapy *Indian J Dermatol* 2009;54(2):180-2.
- [4] Eleftheriou LI, Kerr SC, Stratman EJ. Diagnosis of Atypical Molluscum Contagiosum: The Utility of a Squash Preparation. *Clin Med Res.* 2011; 9(1): 50–51.
- [5] Mohan RPS, Verma S, Singh AK, et al. *BMJ Case Rep* Published online: doi:10.1136/bcr-2013-008744.
- [6] Hoyt BS, Tschen JA, Cohen PR. Molluscum contagiosum of the areola and nipple: case report and literature review. *Dermatology online journal* 19(7): 14.

- [7] Al-Mutairi N. Unusual presentations of molluscum contagiosum. *J Cutan Med Surg.* 2008;12(6):295-8.