



Molluscum Contagiosum: Iatrogenic Complications in Patients

D. Ramachandra Reddy*, R. Prathap, Abisheik Sharma and Kashyap Pallavi

TMMC and RC, TMU, Moradabad, Uttar Pradesh, India

Abstract

Molluscum contagiosum (MC) is caused by the *Molluscum contagiosum virus* (MCV), genus *Molluscipoxvirus*, is a member of Pox virus family confined to human and monkey. The virus can be cultured on both human epidermis and amniotic epithelium. The initial lesion is a 1-2 mm centrally umbilicated papule. In association with HIV- AIDS irrespective of the age of the patient, these small papules become canon ball like, sometimes even 5 cm in diameter, occasionally found hanging from a pedicle on the face. This is generally taken as a diagnostic factor without warranting any serological evidence. The biopsy of the Molluscum shows characteristic Henderson-Peterson Molluscum bodies. These are the tiny elementary bodies within the Molluscum and known to be transmitting the disease once the papule has been opened.

Keywords: Molluscum contagiosum; HIV; AIDS; Iatrogenic complication

Introduction

Iatrogenic complication in the patients treated by qualified people in medical field initiated us to write this article. Ointments like tretinoin, zinc oxide applied to the genitalia and scrotum for MC, where the subcutaneous layer is absent leading on to non-assimilation of the ointment and cream base medicaments produces exfoliation of skin. Later super added infection on the ulcerations and the facia precipitating to Fournier's gangrene. Facia in the scrotum may spread upto the lower part of the clavicle, where the facia get attached.

The viral genome consists of single molecule of linear double stranded DNA and it is divergent of Pox virus family [1-4]. MCV uniquely situated to infection limited to the epidermis [5,6]. A prime example is the altered cellular growth that follows infection by MCV leading to destructive cutaneous lesions of MC. Based on DNA restriction endonuclease technique four genomic subtypes of MCV have been identified, MCV 1-4 with evidence of subtype variants like Type 1v, 1vb, 1vc [7-13]. Most common types are MCV 1 in children and MCV 2 in adults and those with HIV infection. Transmission of MCV occurs with skin to skin via both sexual as well as asexual routes. Common sites are face, trunk, upper extremities, gluteal region and the perineum. Sexually in genitalia, pubic area and perianal regions in homosexuals. Innocent infections through commodes and transvestism. Certain cases have been reported in tattoo centres, sports, gyms, swimming pools and labour ward table also. In association with HIV the rate of MC infection has been seen to be increasing and many cases are regularly seen in the DVL Dept. across the nation especially involving the genitalia, face, pubis with increased size. Dissemination does not occur in profoundly immunocompromised host. MCV has a predilection for follicular epithelium and is uncommon in palms, soles and mucosa. Cell mediated immunity is important for controlling the MCV.

The incubation period of MC averages between 2-3 months with a range of 1week to 6 months [14]. The umbilicated papules have been known to extend between 3-15mm in diameter. On parturition, it may be transmitted to the infant in 10-50% of cases [15,16]. The most frequent complication is eczematous lesions around the papules. Auto-inoculation by scratching has been reported while lesions on the palms, soles and mucosa are rare [17-19]. MC in the eyelid induces an unilateral conjunctivitis. In pregnancy the MC lesions like the genital warts become worsened and lesions have also been

reported in a child as young as 1week old. In immunocompromised patients the lesions increase in size. In HIV patients, MC is a common opportunistic infection and severity of the disease increases with immunodeficiency. With HAART therapy decreases the frequency of MC. MC in the face usually misdiagnosed as Syringiomas, Lichen planus, Epithelial or intradermal Nevi or *Cryptococcus* infection. Histologically, pathognomically one can see enlarged epithelial cells with intracytoplasmic Molluscum bodies.

Safe Treatment Modalities

- Electrocautery
- Punctured with sharpened orange stick dipped in 80% phenol.

The above two methods the MC pox also destroyed along with the papule. In the cryotherapy with liquid nitrogen MC virus is not destroyed, Curettage causes risk of spread.

Conclusion

The places where there is no fat underneath the skin like pinna of the ear, peri orbital area, areola of nipple, scrotum and genitalia, the base of the ointment and creams are not assimilated leading on to exfoliation of the skin. And furthermore in the scrotum facia get infected leads on to a dangerous Fournier's gangrene extending to lower part of the clavicle. So proper methods to be adopted in treating MC in genitalia and scrotum.

References

- Postlethwaite R (1970) Molluscum contagiosum. Arch Environ Health 21: 432-452.
- Brown ST, Nalley JF, Kraus SJ (1981) Molluscum Contagiosum. Sex transm

*Corresponding author: D.Ramachandra Reddy, Professor and HOD DVL department, TMMC & RC, TMU, Moradabad, Uttar Pradesh, India; Tel: 9486901375, 97; E-mail: d.ramachandrareddy52@gmail.com

Received October 30, 2015; Accepted November 19, 2015; Published November 26, 2015

Citation: Reddy DR, Prathap R, Sharma A, Pallavi K (2015) Molluscum Contagiosum: Iatrogenic Complications in Patients. J Trop Dis: S1-003. doi:10.4172/2329891X.S1-003

Copyright: © 2015 Reddy DR, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

- Dis 8: 227-234.
- Gubser C, Hué S, Kellam P, Smith GL (2004) Poxvirus genomes: a phylogenetic analysis. *J Gen Virol* 85: 105-117.
 - Senkevich TG, Koonin EV, Bugert JJ, Darai G, Moss B (1997) The genome of molluscum contagiosum virus: analysis and comparison with other poxviruses. *Virology* 233: 19-42.
 - Alcami A, Koszinowski UH (2000) Viral mechanisms of immune evasion. *Immunol Today* 21: 447-455.
 - Smith KJ, Skelton H (2002) Molluscum contagiosum: recent advances in pathogenic mechanisms, and new therapies. *Am J Clin Dermatol* 3: 535-545.
 - Porter CD, Blake NW, Cream JJ, Archard LC (1992) Molluscum contagiosum virus. *Mol Cell Biol Hum Dis Ser* 1: 233-257.
 - Porter CD, Archard LC (1992) Characterisation by restriction mapping of three subtypes of molluscum contagiosum virus. *J Med Virol* 38: 1-6.
 - Bugert JJ, Darai G (1991) Stability of molluscum contagiosum virus DNA among 184 patient isolates: evidence for variability of sequences in the terminal inverted repeats. *J Med Virol* 33: 211-217.
 - Thompson CH, de Zwart-Steffe RT, Donovan B (1992) Clinical and molecular aspects of molluscum contagiosum infection in HIV-1 positive patients. *Int J STD AIDS* 3: 101-106.
 - Scholz J, Rösen-Wolff A, Bugert J, Reisner H, White MI, et al. (1989) Epidemiology of molluscum contagiosum using genetic analysis of the viral DNA. *J Med Virol* 27: 87-90.
 - Nakamura J, Muraki Y, Yamada M, Hatano Y, Nii S (1995) Analysis of molluscum contagiosum virus genomes isolated in Japan. *J Med Virol* 46: 339-348.
 - Thompson CH (1997) Identification and typing of molluscum contagiosum virus in clinical specimens by polymerase chain reaction. *J Med Virol* 53: 205-211.
 - Birchistle K, Carrington D (1997) Molluscum contagiosum virus. *J Infect* 34: 21-28.
 - Postlethwaite R, Watt JA, Hawley TG, Simpson I, Adam H (1967) Features of molluscum contagiosum in the north-east of Scotland and in Fijian village settlements. *J Hyg (Lond)* 65: 281-291.
 - Silverberg NB, Sidbury R, Mancini AJ (2000) Childhood molluscum contagiosum: experience with cantharidin therapy in 300 patients. *J Am Acad Dermatol* 43: 503-507.
 - Cobbold RJ, Macdonald A (1970) Molluscum contagiosum as a sexually transmitted disease. *Practitioner* 204: 416-419.
 - Sturt RJ, Muller HK, Francis GD (1971) Molluscum contagiosum in villages of the West Sepik District of New Guinea. *Med J Aust* 2: 751-754.
 - Brown J, Janniger CK, Schwartz RA, Silverberg NB (2006) Childhood molluscum contagiosum. *Int J Dermatol* 45: 93-99.

This article was originally published in a special issue, **Prevalence of Tropical Diseases** handled by Editor. Liwang Cui, Pennsylvania State University, USA

Citation: Reddy DR, Prathap R, Sharma A, Pallavi K (2015) Molluscum Contagiosum: Iatrogenic Complications in Patients. *J Trop Dis*: S1-003. doi:10.4172/2329891X.S1-003

OMICS International: Publication Benefits & Features

Unique features:

- Increased global visibility of articles through worldwide distribution and indexing
- Showcasing recent research output in a timely and updated manner
- Special issues on the current trends of scientific research

Special features:

- 700 Open Access Journals
- 50,000 editorial team
- Rapid review process
- Quality and quick editorial, review and publication processing
- Indexing at PubMed (partial), Scopus, EBSCO, Index Copernicus and Google Scholar etc
- Sharing Option: Social Networking Enabled
- Authors, Reviewers and Editors rewarded with online Scientific Credits
- Better discount for your subsequent articles

Submit your manuscript at: www.omicsonline.org/submit/