Reddy et al., J Trop Dis 2015, S1-003
DOI: 10.4172/2329-891X.S1-003

Journal of Tropical Diseases

Research Article Open Access

Molluscum Contagiosum: Iatrogenic Complications in Patients

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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 umblicated 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; Latrogenic complication

Introduction

Latrogenic 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 umblicated 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

a. Electrocautery

b. 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 gentalia and scrotum.

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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

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