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Case report

A CASE REPORT OF MOLLUSCUM CONTAGIOSUM INFECTION IN AN HIV INFECTED INDIVIDUAL

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ABSTRACT

Molluscum contagiosum is a viral disease caused by mollusci pox virus (DNA virus). Seen commonly as disease in children and immunocompromised adults. Infection transmitted by direct skin to skin contact, fomites or sexual contact. A 27 year old male with pearly umbilicated skin coloured papules and nodules over whole face with history of weight loss (10 kg in 3 months) along with history of sexual contact. On investigation HIV ELISA was positive and biopsy report showing Henderson Peterson bodies, conforming molluscum contagiosum. Patient was diagnosed as MCV in HIV. Patient was treated with HAART and topical imiquimod 5% cream and he responded well to treatment.

Keywords: Molluscum, HIV, Umbilicated, sexual contact, biopsy, ELISA, HAART

INTRODUCTION

Molluscum contagiosum (MC) is a common viral disease¹ caused by mollusci pox virus (DNA virus). It is commonly seen in children. The virus forms part of normal flora in the immunocompetent people. It presents as disease in immunocompromised adults. Molluscum contagiosum infection in HIV patients may present with pearly skin coloured umbilicated papules (Fig. 1,2). Giant molluscum and widespread or numerous small miliaria like lesions are more commonly seen in HIV.² However lesions that are large confluent and predominantly facial are characteristic of advanced HIV (AIDS).

CLINICAL FEATURES

A 27 year old male patient, textile merchant by occupation, presented with numerous asymptomatic, umbilicated, pearly, skin coloured papules and nodules over whole face causing cosmetic disfigurement. (Fig. 1,2) Patient gave history of weakness, malaise, anorexia and weight loss 10 kgs in 3 months. No history of fever, cough, sore throat, diarrhoea, vomiting, nausea was present. No history of itching or burning. History of contact exposure with CSW 2 years ago was elicited. No lymphadenopathy present. On needling of a lesion, it was hard and thick not like typical molluscum lesions



Fig.1: Numerous skin coloured papules & nodules on forehead



Fig.2: Numerous skin coloured papules & nodules on left side of face

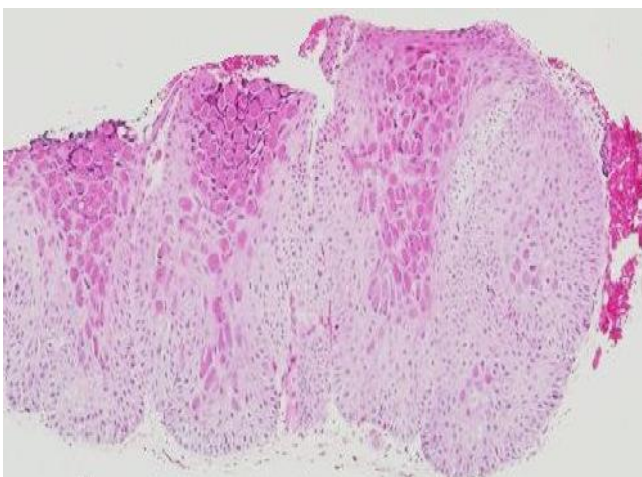


Fig.3: histopathology of Skin biopsy (10X)

DIFFERENTIAL DIAGNOSIS

Investigations: Patient was investigated for complete and differential blood count, Random

blood sugar, VDRL, TPHA, HBs Ag, ANTI-HCV Ab, HIV ELISA (1&2) and skin excision biopsy.

According to the clinical manifestations we made these differential diagnosis :-Lymphomatoid papulosis, Molluscumcontagiosum, Cryptococcosis, Coccidiomycosis, Histoplasmosis, Penicilliosis, Syringomas, Epidermal inclusion cyst, Sebaceous cyst, keratoacanthoma, Arthropod infection , Squamous cell carcinoma , Basal cell carcinoma

Diagnosis; On investigation reports patient was detected positive for HIV ELISA test. VDRL was negative.RBS was normal.

Histopathologic examination with H&E staining reveals a hypertrophied and hyperplastic epidermis. Above the basal layer, enlarged cells containing large intracytoplasmic inclusions (Henderson Peterson bodies) can be seen. There is increase in size of cells as the cells reach horny layer.(FIGURE 3&4)

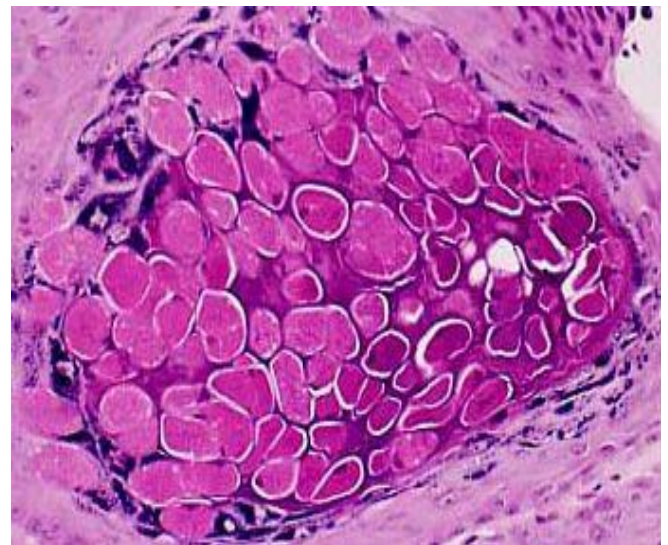


Fig. 4: Histopathology of Skin biopsy (40X)

Patient was diagnosed as Molluscum Contagiosum and HIV based on investigations.

DISCUSSION

Molluscum contagiosum (MC) is a common viral¹ disease caused by mollusci pox virus(DNA virus). It is commonly seen in children. The virus forms part of normal flora in the immunocompetent people. It presents as disease

in immunocompromised adults. Infection is transmitted by direct skin to skin contact or indirectly by means of fomites¹. Disease very rare in infants due to maternally transmitted immunity and long incubation period⁸. MC reported even in 1 week old child³. Genital lesions in adults if present are mostly transmitted through sexual contact⁴. MCV is difficult to grow in usual established cell cultures, but has been propagated in human foreskin xenografts^{2,5,6}. Outbreaks are seen with poor hygiene, low socio economic status, crowded living conditions and household¹⁰. MC more common in atopic children^{7,8}. Genital lesions in children are common even without sexual abuse but lesions with sexual abuse in children are possible¹². MCV has four subtypes (MCV1&2 common in UK^{9,10}) and (MCV 1&3 common in Japan while MCV2 &4 are rare)¹¹. No relationship is seen between viral subtypes, morphology or anatomical distribution⁴. Cutaneous markers in HIV when CD4 counts are <100 cells/cubic mm. classical lesions of MC are discrete, dome shaped, umbilicated, waxy papules which are either skin coloured or white. Lesions are usually distributed on axillae, lower abdomen, sides of trunk, thighs and face. Uncommon sites are scalp, lips, tongue, buccal mucosa membrane and soles¹². Rarely seen on scars¹⁷ and tattoos too (transmitted in the pigment¹³). Small lesions may sometimes coalesce to form plaques (agminate form). Molluscum contagiosum infection in HIV patients may present with pearly skin coloured umbilicated papules (Fig.1,2). 'Giant molluscum' and widespread or numerous small miliaria like lesions are more commonly seen in HIV¹⁴⁻¹⁸. However lesions that are large confluent and predominantly facial are characteristic of advanced HIV(AIDS). Atypical lesions are common and may resemble folliculitis, abscess, warts, furuncles and cutaneous horns without characteristic umbilication. In HIV infected individuals, molluscum infection tends to be

progressive, persistent refractory to treatment and recurrent.

TREATMENT METHODS

Electrofulguration with repeated curettage is found to be effective for multiple large and confluent lesions. Lesions usually resolve spontaneously in 6-9 months. Rarely lesions persist for several years. Lesions mostly heal without a scar but sometimes atrophic scars may be present. Resolution is heralded by inflammation, suppuration and crusting of lesions. Eyelids if involved may lead to toxic conjunctivitis. Similarly hair follicle involvement leads to molluscum folliculitis. For cases refractory to standard therapies topical imiquimod 5% cream may be effective in both children and adults. Topical cidofovir, a nucleotide analogue with activity against several DNA viruses, is reported to be efficacious. Cryotherapy with liquid nitrogen is effective but a painful procedure. Its repeated at 3-4 weekly intervals until all lesions disappear. Diathermy can be done for large lesions. For recalcitrant lesions pulse dye laser has also been used effectively. Topical application of phenol and cantharidin 0.9% without spreading to periphery is used effectively in the destruction of lesion. Application of silver nitrate paste 40% or salicylic acid 15-20 % in collodion or acrylate base once or twice weekly will speed clearance. Potassium hydroxide 10 % solution used topically everyday also gives good results.

CONCLUSION

This case is an atypical presentation of MCV infection seen in HIV patient. He was clinically suspected as lymphomatoid papulosis & then investigated. On biopsy it was detected to be MCV infection. Due to atypical presentation of MCV, we suspected HIV and investigated for it. Patient came positive for ELISA (along with contact history) and was diagnosed as MC in HIV. He did not have any spontaneous resolution

unlike most typical molluscum contagiosum lesions. Patient was started on HAART (highly active anti retro viral therapy). He was prescribed topical imiquimod for molluscum lesions on alternate days for 4 weeks (6-10 hours of contact period). Patient was advised to abstain from contact sports, swimming pools, avoid sharing towels, clothes, bedsheets and communal baths to prevent transmission to others. Patient was advised to get his spouse fully investigated for HIV and Molluscum infection. Patient responded well to treatment. He did not develop any scarring or crusting.

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