Cutaneous Cryptococcosis in Molluscum Contagiosum Skin lesion- A Rare Clinical Entity

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Abstract

Cutaneous cryptococcosis is seen in 10-20% of patients with disseminated cryptococcosis. It can masquerade as Kaposi sarcoma, molluscum contagiosum, vasculitis. We describe coexisting molluscum contagiosum and cryptococcal skin lesions; highlighting the importance of skin biopsy to distinguish them. Cutaneous cryptococcisis can precede systemic involvement by months.

Keyword: Cutaneous cryptococcosis, molluscum contagiosum, opportunistic infection

Introduction

Human immuno virus (HIV) positive people are susceptible for a wide range of systemic and cutaneous infections. Cryptococcal skin lesions can masquerade as molluscum contagiosum lesions. Here we describe co-existing cutaneous cryptococcosis and molluscum contagiosum lesions in a patient with acquired immunodeficiency syndrome.

Case report

A 45 year old male patient presented with history of skin lesions of one year distributed all over the body, non-pruritic, which were progressively increasing. Patient was poorly built and nourished. He had multiple papules with umbilication over the face and a few papules with crusting were present. The skin lesions were predominantly distributed over the extremities, face and back; with relative sparing of the abdomen and chest. The skin lesions were suggestive of molluscum contagiosum. Excision biopsy of the skin was taken from forearm and face. The biopsy from forearm skin was positive for cryptococci as demonstrated by Gomori's methenamine silver (GMS) and Per-iodic acid schiff's (PAS) staining. The biopsy from face was positive for molluscum bodies, in the subcutaneous tissue. The patient was diagnosed to have HIV infection with a CD count of 102cells/mm^3. A diagnosis of Acquired immuno deficiency syndrome (AIDS) was made. The patient was started on injection Fluconazole 150mg once a day for 14 days. After the 5^{th} day of starting intravenous fluconazole the skin lesions started regressing and at the end of 14 day course most of the skin lesions had healed, following which patient was started on Tablet Fluconazole 400mg once daily and Highly Active Anti Retroviral Therapy (HAART), under supervision. (Figure 1).

Discussion

Cryptococcosis is a systemic infection caused by the Cryptococcus. Cryptococcus is encapsulated fungus, appears as spherical or ellipsoid yeast-like cells, reproduces by budding, and is ubiquitous in soil and avian guano. The major form responsible for human infection is Cryptococcus neoformans. The infection is acquired by inhalation route, during childhood. Depressed cell mediated immunity is the major risk factor for development of cryptococcosis. The most

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common risk factor is HIV; with a CD4 count <200cells/mm^3. The other known risk factors are diabetes, lymphoreticular malignancy, solid organ transplant and patient on immunosuppressive drugs[1].

Skin involvement is the second most frequent manifestation of cryptococcosis [2]. Skin involvement is seen in 10-20% of those with systemic involvement [2]. The lesions vary and may often be misdiagnosed, as molluscum contagiosum, Kaposi sarcoma and vasculitis[1]. Lesions may have varied appearance as papules, tumors, vesicles, plaques, abscess, cellulitis, pupura, draining sinus, ulcers, bullae or subcutaneous swelling[1,2]. Cutaneous cryptococcosis can be either primary or secondary. In primary cutaneous cryptococcosis there is no evidence of systemic involvement and the lesions are usually single and secondary systemic manifestations are not seen in immunocompetent individuals[3]. Molluscum contagiosum is caused by pox virus. It is seen in 5-18% of people living with HIV and is a common cutaneous manifestation of the AIDS. The lesions may have atypical manifestation in people with AIDS and can be hypertrophic. The skin lesions of cryptococcosis may precede life threatening disease by several weeks [2]. Clinical examination alone is not sufficient to identify nature of skin lesions, histopathological examination is warranted [4,5,6]. Our case highlights the need for accurate diagnosis of skin lesions using biopsy, in people with AIDS.

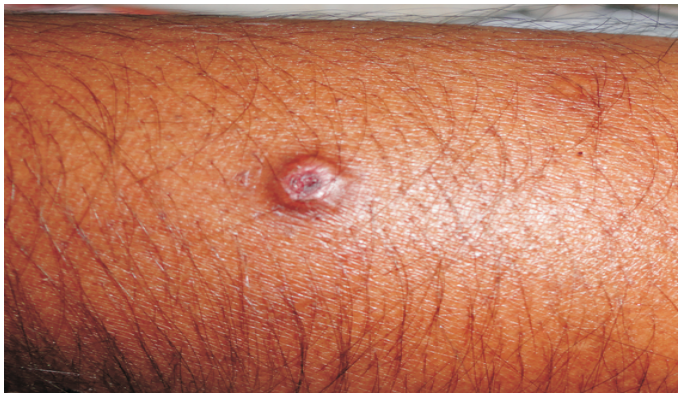

Figure 1. Umbilicated papuplar lesion on fore arm

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