

Case Report

Candidiasis revealing an HIV-infection

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Abstract: Human immunodeficiency virus (HIV) infection is a worldwide health problem, which affects in both developing and developed countries. The oral lesions caused due to this disease can drastically change the life of the patient, in terms of quality.

Keywords: Acquired immune deficiency syndrome, human immunodeficiency virus, candidiasis.

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INTRODUCTION

Acquired Immune Deficiency Syndrome (AIDS) is a collection of symptoms or diseases caused by decreased immunity due to infection of Human Immunodeficiency Virus (HIV), AIDS as the final stage of HIV (1. Djoerban, Z., & Dauzi, S. 2009). Oral candidiasis is an opportunistic infection that is often found in people infected with HIV or AIDS characterized by a decrease in CD4+ count. Oral candidiasis accounts for more than 90% of HIV/AIDS patients. The infection is an important sign of disease progression towards AIDS. Oral candidiasis is also a preliminary manifestation in the oral cavity that may indicate the progression of HIV infection in approximately 30-80% of patients (Yogev, R., & Chadwick, E.G. 2004). We report a patient whose HIV infection has been revealed by oral candidiasis.

CASE REPORT

A 26 year-old male patient had come to the Department of dermatology with a chief complaint of burning sensation throughout the oral cavity for the past

6 months. History revealed that initially the burning sensation was mild in intensity but gradually increased to the present state. He had been given topical application and medication following which there was symptomatic relief during application only.

On further probing, he gave a history of having sexual contact with multiple partners for the past 8 years. Intraoral examination revealed multiple raised white patches interspersed with areas of erythema in multiple sites of the oral cavity. These lesions were abundantly seen in the palate and tongue. The other areas included upper and lower labial and alveolar mucosa and floor of the mouth (Figure 1). The history and the above clinical features led to a provisional diagnosis of erythematous candidiasis. The routine hematological examination revealed a low lymphocyte level at 400.

Furthermore, special investigation of HIV, ELISA was done, which turned to be positive. A final diagnosis HIV-induced erythematous candidiasis was made.



Figure 1 : multiple raised white patches interspersed with areas of erythema in multiple sites of the oral cavity

DISCUSSION

The first report of AIDS described 5 patients with *Pneumocystis carinii* pneumonia. All of them had laboratory-confirmed mucosal infection with *Candida albicans* (Centers for Disease Control (CDC). 1981). This led the authors to suggest the 'possibility of a cellular-immune dysfunction related to a common exposure that predisposes individuals to opportunistic infections such as pneumocystosis and candidiasis'

In HIV-positive patients, both colonisation and disease in oral cavity and other mucosal surfaces is common, especially with *C. albicans*, at rates that increase with progression of disease (Vargas, K.G., & Joly, S. 2002)

In HIV patient, oral manifestations are the most important and earliest indicators. The internationally identified and accepted seven cardinal signs of HIV infection are oral candidiasis, hairy leukoplakia, Kaposi sarcoma, linear gingival erythema, necrotizing ulcerative gingivitis, necrotizing ulcerative

periodontitis, and non-Hodgkin lymphoma. The features mentioned above are present in 50% of patients with HIV infection and 80% in patients with AIDS (Coogan, M.M. *et al.*, 2005).

Oral candidiasis is primarily caused by *Candida albicans*, a dimorphic fungal organism present in the oral cavity in a nonpathogenic state. These organisms have the ability to turn into pathogens with hyphae forms. Conditions that support this transformation include immune dysfunction. Disorders of polymorphonuclear leukocytes lead to systemic susceptibility of infection, whereas disruption of cellular immunity regulated by CD4+ T-cells reduces protection against mucosal infections (Odds, F.C., & Bernaerts, R. 1994).

Management depends on the extent of infection. The commonly used topical application depends on the severity of the disease. In mild to moderate cases nystatin oral suspension, clotrimazole troches, and nystatin pastilles can be used. In moderate to severe cases systemic drug fluconazole is used. The

other common systemic drug, which can be used in fluconazole-resistant cases is itraconazole and voriconazole (Greenberg, M.S. et al., 2008).

CONCLUSION

One of the earliest manifestations of HIV infection is oral candidiasis. Oral lesions could be the early signs of HIV infection. This case was writing expected to motivate colleagues especially dentists but also dermatologist to be able to diagnose HIV/AIDS patients earlier. Treatment of oral candidiasis depends on type of candidiasis, distribution and severity of the infectio

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