Oral Cavity Act As A Diagnostic Tool For HIV: General Physician

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Abstract

Oral disease is frequently associated with HIV. Common or notable HIV related oral conditions include xerostomia, candidiasis, oral hairy leukoplakia, periodontitis and ulcerative conditions. HIV associated oral disorders occur early in HIV infection, not infrequently as the presenting sign or symptom. Thus, early detection of associated oral disease should in many cases, result in earlier diagnosis of HIV infection. Family physicians should be able to recognize HIV associated oral disease and to provide appropriate care and referred.

INTRODUCTION

Oral disease is frequently associated with HIV. Many HIV associated oral disorders occur early in HIV infection, not infrequently as presenting sign or symptom. In developed countries, HIV disease progression is monitored by two key laboratory marker : CD4 lymphocyte count, and HIV viral load. Unfortunately, these tests are not readily available in many developing countries like India. Thus, early detection of associated oral disease should, in many cases, result in earlier diagnosis of HIV infection.

XEROSTOMIA

Xerostomia is a major contributing factor in dental decay in HIV infected individuals. Xerostomia is common in HIV disease, most often as a side effect of anti-viral medications or of the other antihypertensive, antidepressant, anxiolytic or analgesic medications commonly prescribed for patients with HIV infection. Oral hygiene instruction, regular maintance, and the use of prescription strength, fluoridated dentifrice is essential.

CANDIDIASIS

It is most common orofacial manifestation of HIV infection. Oral candidiasis has also been shown to be a significant predictor of HIV disease progression in both adult and children. Erythematous candiasis appears clinically as multiple small or large patches, most often localized on tongue or palate. Pseudo membranous candidiasis is characterized by the presence of multiple superficial, creamy white plaques that can be easily wiped off, revealing an erythematous base. Angular cheilitis is characterized by the presence of erythematous fissures at the corners of the mouth. Clotrimazole troches, nystatin pastilles, and nystatin oral suspension are effective. Systemic treatment for oral candidiasis involves the use of ketoconazole and triazole antifungal medications.

ORAL HAIRY LEUKOPLAKIA

It is more common among HIV infected adults than among HIV infected children. It presents as while, thick patches that do not wipe away and that may exhibit vertical corrugations with a hair like appearance. The asymptomatic lesions usually start on the lateral margins of the tongue and sometimes inside the cheeks and lower lip. Oral acyclovir (3,200 mg daily in divided dose), have all been reported as successful treatments.

HIV ASSOCIATED PERIODONTAL DISEASE

Periodontal disease is common among HIV infected patients. Necrotizing ulcerative gingivitis is more common in adults than in children. It is characterized by presence of sloughing, ulceration and necrosis of one or more interdental papillae associated with pain, bleeding and fetid halitosis. Necrotizing ulcerative periodontitis is characterized by the extensive and rapid loss of soft tissue and teeth. Linear gingival erythema is characterized by presence of a 2-3 mm red band along the marginal gingival gingiva, associated with diffuse erythema on the attached gingiva and oral mucosa. Treatment includes debridement by a dental

professional, twice-daily rinses with a chlorhexidine gluconate suspension for 2 weeks and improved home oral hygiene.

ULCERATION DISEASE

Herpes simplex virus (HSV) infection is widespread and oral lesions are common. Recurrent intraoral HSV out breaks start as a small gap of vesicles that rupture to produce small, painful ulcerations that may coalesce. Oral hygiene and acyclovir is treatment of choice.

Aphthous ulcerations are characterized by a hole of inflammation and a yellow gray pseudo-membranous covering. They are very painful, especially during consumption of safety, spicy, or acidic foods and beverages or hard or rough foods. Treatment for milder case in values the use of topical corticosteroids such as dexamethasone 5 ml swished for 1 minute and then expectorated, 2 to 3 times daily until symptoms resolve. Neutropenic ulcerations are very painful ulcerations that can appear on both keratinized and non-keratinized tissues, and are associated with absolute grannulocyte counts of less than 800 cell/ml. Patients should receive granulocyte count stimulating factor treatment prior to systemic or topical steroid treatment, depending on size and location of lesion.

CONCLUSION

HIV related oral conditions occur in a large proportion of patients, and frequently are misadiagosed or inadequately treated. Dental experitze is necessary for proper management and diagnosis of HIV infection because CD4 lymphocyte count and HIV viral load tests are not readily available in India. Oral cavity is easily accessible to clinical examination, oral facial lesions associated with HIV infection may be used as clinical markers of HIV disease progression.

MCQ

Q1. The most common oral manifestations of HIV are

1. Candidiasis
2. Xerostomia
3. Oral hairy leukoplakia
4. All of the above

Q2. Which of the following test is key marker of HIV

1. CD4 lymphocyte count
2. HIV viral load
3. Both
4. None of these

Q3. Which of the following is true

1. In developed countries, HIV disease progression is monitored by two laboratory marker : CD4 lymphocyte counts, and HIV viral load
2. CD4 lymphocyte count and HIV viral load test are easily available in India
3. Many HIV associated oral disorders occur early in HIV infection, not infrequently as presenting sign or symptoms

Q4. Which of the following is true

1. Clotrimazole troches, nystatin pastilles and nystatin oral suspension are most effective in treatment of oral candidiasis
2. Oral acyclovir used for treatment of oral hairy leukoplakia
3. HIV associated periodontal disease is treated by, debridement by dentist, twice rinses with a chlorhexidine gluconate suspension
4. All of above

Q5. Oral symptoms are more important for diagnosis of HIV because

1. CD4 lymphocytes counts and HIV viral load test are not readily available in India
2. Oral cavity is easily accessible to clinical examination
3. HIV associated oral disorders occur early in HIV infection, not infrequently as presenting sign and symptoms
4. All of the above

Answer key:

1. (4)
2. (3)

3. (1), (3)
4. (4)
5. (d)

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