Talking with Patients

HIV/AIDS and Oral Health

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WHAT IS IT?

The words HIV and AIDS are acronyms for human immunodeficiency virus and acquired immune deficiency syndrome, respectively. HIV is a blood-borne retrovirus that attacks the body's immune system, which is responsible for fighting infections throughout the body. With a debilitated immune system, opportunistic infections can potentially become life-threatening. HIV was first reported in humans in the early 1980s, and HIV infection is today considered a pandemic. A recent prevalence study revealed that in 2003, there were over 1,000,000 people living with HIV/AIDS in the United States.¹ The Centers for Disease Control and Prevention (CDC) estimates that 40,000 persons become infected with HIV every year in the United States.²

HIV infection can occur via contaminated body fluids by intimate sexual contact, blood transfusion, sharing of contaminated needles, or mother-to-child transmission. Although HIV has been found in saliva, tears, and urine in HIV-infected patients, it is not believed that the virus can be transmitted by these fluids. Once the HIV virus

gains access to the bloodstream, it binds to immune system cells, increasing the chance that the person will develop opportunistic infections, particularly involving the lungs, stomach/intestines, or brain, or malignant diseases associated with AIDS, such as Kaposi's sarcoma, lymphoma, and carcinomas.³

HOW DO THEY AFFECT YOUR ORAL HEALTH?

As a result of weakened immune system defenses, people with HIV/AIDS may be affected by a number of oral diseases caused by opportunistic infections. These manifestations may sometimes be present in patients who are not aware of their HIV/AIDS infection status; therefore, the dental team can play an important role in diagnosing the condition.4 HIV/AIDS oral manifestations include candidiasis, angular cheilitis, hairy leukoplakia on the tongue, cold sores (herpes simplex infections), cancer sores (recurrent aphthous ulcers), gingival erythema, severe periodontal disease, Kaposi's sarcoma (characterized by bluish-purple or red lesions), and severe stomatitis. The most common oral mucosal infection seen in HIV/AIDS patients is

oral candidiasis or thrush that appears as white or yellow (cottage cheese-like) removable plaques. Patients may complain of pain or a burning sensation in the mouth. This infection is often cured by topical or systemic antifungal drugs, but it may recur, particularly if the patient has a dry mouth. It is important to note that many of these oral conditions can be present in non-HIV/AIDS infected patients and that many people with HIV/AIDS, either those who are in the early stages of the disease or who are under effective medical management, will have no unusual oral conditions.

Routine oral health care for patients with HIV/AIDS is important for maintaining oral health and life enjoyment.⁵ There is little evidence of unusual rates or severity of complications from dental procedures among persons with HIV/AIDS who are sufficiently healthy to be seen in an office setting.6 The dentist may need to work together with the patient's physician when planning surgical procedures for the patient who also has a bleeding disorder or severe immune deficiency. Patients experiencing a high rate of dental cavities may

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have dry mouth as a side effect of the medications they are taking and may benefit from extra fluoride treatments.

CONCLUSIONS

HIV/AIDS is a debilitating condition that affects the body's immune system. Several opportunistic oral infections can develop in individuals affected by HIV/AIDS. Many of these oral infections can be treated with local or systemic medications by the dentist, but treatment of more severe infections should ideally be done in consultation with the patient's physician. Oral opportunistic infections may be the first sign of immune decline, either in the patient who has not yet been

diagnosed with HIV or in the patient under medical care who is experiencing a lapse in or failure of HIV drug treatment effectiveness. Routine dental care is important for HIV/AIDS patients and is not likely to result in any greater rate of complications.

DISCLOSURE

The authors do not have any financial interest in the manufacturers whose materials are discussed in this article.

REFERENCES

 Glynn M, Rhodes P. Estimated HIV Prevalence in the United States at the End of 2003. National HIV Prevention Conference, June 2005, Atlanta. Abstract T1-B1101. Available at:

- http://www.aegis.com/conferences/ NHIVPC/2005/T1-B1101.html (accessed June 26, 2007).
- CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. MMWR 1999;48(RR-13):1–28.
- 3. Little JW, Falace DA, Miller CS, Rhodus NL. Dental management of the medically compromised patient. 6th ed. St. Louis (MO): Mosby; 2002, pp. 221–47.
- Mosca NG, Hathorn AR. HIV-positive patients: dental management considerations. Dent Clin N Am 2006;50:635–57.
- 5. Patton LL. HIV disease. Dent Clin N Am 2003;47;467–92.
- Management of Dental Patients Who Are HIV Positive. Summary, Evidence Report/Technology Assessment Number 37. AHRQ Publication No. 01-E041, March 2001. Agency for Healthcare Research and Quality, Rockville, MD. Available at: http://www.ahrq.gov/ clinic/epcsums/denthivsum.html (accessed July 9, 2007).

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