Oral Health and HIV

Oral health plays a significant role in an individual’s overall health status, and HIV-positive patients receiving care in the public health sector are almost certain to have significant dental disease. Pain and infection may make it difficult to eat or interfere with medication regimens. Add active substance abuse to the mix and the problems multiply. The mouth also can be a harbinger of other medical issues. It presents clues that may signal the presence of other disease states and even indicate whether current HIV therapy is losing its effectiveness.

“The mouth is a window to the rest of the body,” says David Reznik, D.D.S., Director of the Oral Health Center, Infectious Disease Program, Grady Health System in Atlanta. Addressing oral conditions, he says, is paramount to maintaining optimal health and also may contribute to compliance with substance abuse programs by reducing pain.

Complications from Illegal Drug Use - - People who work with substance addicted consumers can play a crucial role in influencing behavior or providing service that leads to early HIV detection. Users sometimes end up contracting HIV or other sexually transmitted infections because the drug reduces inhibitions. When illicit drug use is combined with an HIV diagnosis, oral health is truly at risk.

Use of crystal methamphetamine can exacerbate dental problems. A propensity to grind teeth, a predilection for caffeinated, sugary drinks, and poor oral hygiene are associated with meth use – and a prescription for disaster. The chemical components of the drug, such as muriatic acid, sulfuric acid and lye, are corrosive. Users frequently suffer from severe dry mouth. Losing the natural antimicrobial properties of saliva results in deterioration of teeth, as well as gingivitis or inflammation of the gums. Left untreated, this can lead to periodontitis - disease of the gums and supporting tissue - which is the number one reason adults lose teeth. “I’ve seen multiple examples of 25 to 30-year-old patients whose dental x-rays look like those of a 60-year-old who seldom used a toothbrush,” says Dr. Reznik. In fact, lack of dental hygiene is another factor contributing to disease. Addicts tend to lose interest in routine oral care, failing to brush and floss or maintain proper nutrition.

(Continued on page 2)
Barriers to Care - - Before patients can receive treatment, they must navigate numerous barriers to care. Cost, fear, and lack of access to dental professionals are among the roadblocks they encounter. If a patient is having difficulty coming up with a medication co-payment, they will not have money to pay for dental care, Dr. Reznik points out. Even if an individual qualifies for Medicaid, it only covers emergency dental care. There are no provisions for preventive, restorative, or prosthetic services.

While cost is an enormous issue, fear of disclosing HIV status is also crippling. “The stigma associated with HIV is driving the epidemic,” says Dr. Reznik. “We are 27 years into this epidemic, and it’s time for the stigma to end.” Yet the problem still exists. Patients are afraid to reveal their status, sometimes fearing they will be denied care. In the 1980s, however, the situation was out of control. Many dentists refused to treat patients who carried the virus, fueled by their own fears after the first cases of what would later be identified as HIV/AIDS appeared. Today, it is against the law in the United States for a dentist to refuse treatment to patients based on their HIV status.

In fact, that’s exactly how Dr. Reznik, one of the nation’s leading authorities on oral health of HIV patients, began his venture into this area of care in 1986. It started with an angry phone call. A patient who took excellent care of his teeth and was accustomed to receiving regular dental care contacted Reznik after being denied services by a string of providers, including his own. He was furious that no one would treat him when he had the money to pay the bill. Realizing the anger was a result of frustration due to discrimination and fear, Dr. Reznik welcomed him into his practice. Opening that door changed his career path, which once included a private practice in Atlanta’s Buckhead district, and has led the Emory University dental school graduate to national prominence, including a seat on the Presidential Advisory Council on HIV/AIDS.

Decades ago the situation had turned into a crisis. Multitudes of patients sought care, but had limited means to pay for services. Sandy Thurman, then Executive Director of AID Atlanta and later to become President Bill Clinton’s “AIDS czar”, asked Dr. Reznik if he would be willing to offer services to AID Atlanta clients on a sliding fee scale, based on ability to pay in 1987. He agreed, frequently providing care at no charge. In 1988 Dr. Joe Wilbur, former director of Infectious Diseases for the Georgia Department of Human Resources, called with the same request on behalf of Grady’s HIV-positive patients.

By 1990 half the patients in Dr. Reznik’s practice were living with HIV or AIDS and he realized it was time to create an oral health program for the Atlanta HIV community. He found a home at Grady, where he remains today. While the clinic is known for its outstanding services, people outside the Atlanta area, particularly in rural communities, still have difficulty finding low-cost services, and free services funded through Ryan White grants are limited. A shortage of qualified professionals further diminishes access to care. (The Georgia Dental Association offers a list of clinics throughout the state that provide service to patients with financial limitations: http://www.gadental.org/displaycommon.cfm?an=1&subarticlenbr=75).

With a new State Dental Director, Elizabeth C. Lense, DDS, MHA, Dr. Reznik predicts the situation will improve. He knows Dr. Lense well, since she once was a member of the Grady Dental Service, directing the Hughes Spalding Children’s Dental Clinic. “I expect her to do a remarkable job in her new role,” he says.
Dental Issues and Major Health Concerns - - There is tremendous evidence regarding the pervasive-ness of oral health problems among the HIV community. Take a look at data collected from 50 consecutive patient charts pulled last December from the files of Grady’s Infectious Disease Oral Health Center:

92% presented with severe periodontal disease
90% required at least one filling for a total of 329 dental restorations among the 50 patients
86% required at least one extraction; a total of 189 teeth needed to be pulled
64% required at least one removable dental prosthesis

While these revelations are astonishing, dental maladies comprise only a partial picture of the issues patients face. The list includes fungal infections, such as thrush; bacterial infections causing rapid destruction of gums and teeth; viral diseases such as oral hairy leukoplaikia; cancer; and a variety of other conditions, including dry mouth, which is extremely prevalent in HIV patients and can cause a number of severe complications.

Knowledge about oral health is crucial for anyone working with at-risk populations. The primary reason is that oral disease can be an early sign of HIV - and early detection is critical to long-term survival.

Recently, two new problems have emerged: oral warts caused by the human papilloma virus (HPV), which also has been associated with cervical cancer, as well as squamous cell carcinoma (“skin” cancer) appearing in the mouth. And, researchers are beginning to make another intriguing connection. Oral and throat carcinomas have long been associated with smoking. While there has been a reduction in smoking, the incidence of these cancers has not experienced a similar decline. Now scientists are scrutinizing another possible factor: a relationship between HPV and oral sex. People who have had more than five oral sex partners are 250 percent more likely to have throat cancer than those who do not have oral sex. The connection between throat cancer and certain types of HPV has been established. Further study is needed, but this information has implications for the general population, as well as those living with HIV.

Compared to more dramatic diagnoses, xerostomia – or dry mouth – may not seem like a big deal. In reality, “it affects at least 30 percent of HIV-positive patients, if not more.” Disease processes and medication change the quantity and quality of saliva, leading to rapid advances in dental decay and periodontal disease. The process is so marked, someone only 30 years of age may have the tooth and bone deterioration typical of a 60-year-old.

The Value of Knowledge - - Knowledge about oral health is crucial for everyone who works with at-risk populations. One reason is early detection. Oral disease can be an early sign of contracting the virus, and early detection is certainly crucial to long-term survival. One recent study found that untreated HIV-infected patients with oral candidiasis progressed to

(Continued from page 2)
Oral Disease Associated with HIV

Fungal Diseases - Oropharyngeal candidiasis is the most common fungal infection seen in association with HIV infections. There are three forms:
- Erythematous candidiasis: A red, flat subtle lesion on the surface of the tongue and/or palate. Patients complain of oral burning, frequently while eating salty or spicy food or drinking acidic beverages.
- Pseudomembranous candidiasis (thrush): Creamy white curd-like plaques in the mouth that will wipe away leaving a red or bleeding underlying surface.
- Angular cheilitis: Erythema and/or fissuring of the corners of the mouth.
- Linear gingival erythema: A periodontal disease characterized by a red band along the gum line.

Bacterial Diseases - While chronic adult periodontal disease occurs frequently in those with HIV, three unique presentations of periodontal disease have been reported in this patient population:
- Linear gingival erythema (caused by a fungus, mentioned above).
- Necrotizing ulcerative gingivitis (NUG): Associated with rapid destruction of soft tissue.
- Necrotizing ulcerative periodontitis (NUP): Associated with rapid destruction of hard tissue and a marker of severe immune suppression. Characterized by severe pain, loose teeth, bleeding and odor.

Viral Diseases
- Herpes simplex virus (HSV-1): Small painful ulcerations.
- Herpes zoster: Ulcerations along any branch of the trigeminal nerve.
- Oral hairy leukoplakia: White, corrugated, non-removable lesions on the edges of the tongue caused by the Epstein-Barr virus.
- Oral warts: May have a cauliflower, spike or raised, flat appearance. Caused by the human papilloma virus (HPV).

Cancers
- Kaposi’s sarcoma: The most frequent oral malignancy seen in association with HIV infection. Macular, nodular or raised and ulcerated appearance with colors ranging from red to purple.
- Non-Hodgkin's lymphoma: Large, painful ulcerated mass on the palate or gingival tissues.

Other Notable Problems
- Salivary gland disease: Characterized by enlarged salivary glands
- Xerostomia (also called “dry mouth”): A common complaint among people with HIV. Changes in the quantity and quality of saliva may lead to increased dental decay.

Source: Excerpted with permission from “Oral Manifestations of HIV/AIDS in the HAART Era” www.hivdent.org

(Continued from previous column)

While oral lesions may suggest the presence of HIV, their appearance after starting antiretroviral therapy could be an indication that the medication is beginning to lose its effectiveness, signaling a decline in immune function. Finally, for those working with HIV-positive patients in substance abuse clinics, good oral health means they are more likely to be compliant. If a substance addicted consumer is in pain, they are less likely to stay clean. Chances for recovery increase, he says, if you eliminate the agony caused by oral problems and disease.