

## TRANSLUMINAL EXTRACTION

The transluminal extraction catheter grinds up the lesion and aspirates the debris, creating larger particles than rotational atherectomy. It is best used for saphenous vein grafts that are diffusely diseased. Although the immediate results are somewhat better than those seen with angioplasty, the restenosis rate is still 40% to 50%. It is indicated for patients who are not good candidates for repeat bypass surgery.

## COMMENT

Restenosis, the major problem in revascularization, develops because of multiple mechanisms. For example, elastic recoil is a factor in 30% to 40% of cases of restenosis. The healing process itself also plays a contributing role. Mechanical devices may be beneficial, but all of these mechanisms may not respond to purely mechanical solutions.

Balloon angioplasty is still a versatile and robust technique and will be the mainstay of revascularization therapy for several years. However, other devices will find greater utility in specific situations and ultimately each will have its own niche—for example, the Rotablator for calcified lesions, directional atherectomy for highly eccentric lesions, and the transluminal extraction catheter for diffusely diseased vein grafts. Backing up all of these is the possibility of stenting for abrupt closure.

STEPHEN G. ELLIS, MD  
Department of Cardiology  
The Cleveland Clinic Foundation

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## A CHECKLIST OF COMMON ORAL MANIFESTATIONS OF HIV INFECTION

The range of diseases that can present in the patient infected with the human immunodeficiency virus (HIV) demands a multidisciplinary approach to diagnosis, staging, and treatment. And because the earliest manifestations of HIV-related disease often appear in the oral cavity, an oral examination is an essential aspect of the workup of all patients known to be HIV-positive.

At least 40 oral manifestations of HIV have been recorded. Those appearing most frequently can be detected by dentists and physicians who are sensitive to the breadth and prevalence of the disease. Periodontal disease is common in these patients, despite good oral hygiene, and warrants intervention by a dental practitioner.

The following brief checklist outlines the clinical presentation and treatment of some common oral manifestations of HIV.

## ORAL CANDIDIASIS

Candidiasis is the most common infection to present in the oral cavity, and the atrophic form is the usual manifestation. Chronic hypertrophic, pseudo-membranous (thrush), and angular cheilitis forms also can occur. Any of these suggest the development of immune system dysfunction, and they are sometimes the only early signs. When these lesions are biopsied, they are usually positive for candidiasis.

The classic hypertrophic form affects the hard and soft palate and the oropharyngeal region. It is relatively easy to diagnose. More subtle presentations are erythema of the hard palate, dilated minor salivary glands (seen in heavy smokers as nicotine stomatitis), and clusters of "smoke rings" on mucosal tissue. All of these should raise the index of suspicion for HIV infection in an undiagnosed patient, and a smear or biopsy should be sent to the cytology laboratory. As HIV infection progresses, candidiasis may present as "hairy tongue," an elongation of filiform papilla of the dorsum of the tongue.

Nystatin oral pastille, 200,000 units three to five times a day, is the initial drug of choice for candidiasis. Nystatin vaginal tablets, 100,000 units dissolved in the mouth tid, can also be effective. If nystatin fails to

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produce a satisfactory response, clotrimazole oral troches, 10 mg five times a day, are the first alternative. Fluconazole has recently been approved for patients refractory to both nystatin and clotrimazole. The regimen is two 100-mg tablets on day 1, followed by one 100-mg tablet daily for 14 days. Some resistant cases can be managed with ketoconazole, 200 mg/d; however, this agent might be rendered ineffective by the absence of gastric acid often seen in acquired immunodeficiency syndrome (AIDS) patients. Liver function tests are recommended in addition to frequent monitoring during treatment. Some patients may require maintenance therapy of one to two nystatin pastilles or two to three clotrimazole oral troches daily.

#### HAIRY LEUKOPLAKIA

Hairy leukoplakia, not to be confused with hairy tongue, is almost always indicative of HIV infection. It is the first manifestation of HIV in up to 22% of HIV-infected patients and is often followed shortly by the development of AIDS. It usually appears as a white bilateral lesion on the lateral borders of the tongue. Since the infection can be confused with candidiasis, a trial course of antifungal therapy may be useful. If the lesions persist, then a biopsy can be performed. Light microscopy will not show anything unusual, but electron microscopy or the application of special stains will reveal the Epstein-Barr virus and confirm the diagnosis. Acyclovir, 1,800 to 2,400 mg/d for 2 weeks, is the recommended treatment. Hairy leukoplakia tends to recur after treatment is stopped.

#### KAPOSI'S SARCOMA

Kaposi's sarcoma in an HIV-seropositive patient establishes a diagnosis of AIDS. In a patient not diagnosed with AIDS, a suspicious lesion should be biopsied. Kaposi's sarcoma lesions can present anywhere in the oral cavity, although the palate is usually the first area involved. Oral lesions can coexist with skin lesions. Low-dose radiation therapy, surgical excision (laser excision is the most effective), or injection with vinblastine can be used as palliative treatments.

#### HERPES SIMPLEX

Herpes simplex may present as orofacial ulcerations. Such lesions can enlarge and become confluent and extensive. Diagnosis is aided by cytologic examination and confirmed by culture. Treatment is a daily regimen of oral acyclovir, 1,000 to 2,400 mg in divided doses. Severe infection may require intravenous acyclovir.

GEZA T. TEREZHALMY, DDS, MA  
Consultant, Oral Medicine  
Department of Dentistry  
The Cleveland Clinic Foundation

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