

AAOM Clinical Practice Statement



Subject: Dental Care for the Patient with an Oral Herpetic Lesion

The American Academy of Oral Medicine (AAOM) affirms that treatment of dental patients should encompass recognition of infectious diseases that can manifest in the orofacial region, implementation of disease management, and prevention of disease transmission. Furthermore, the AAOM recommends education and training regarding infectious diseases and procedures that reduce the risk of disease transmission and that provide for disease control within the dental setting.

This Clinical Practice Statement was developed as an educational tool based on expert consensus of the AAOM leadership. Readers are encouraged to consider the recommendations in the context of their specific clinical situation and consult, when appropriate, other sources of clinical, scientific, or regulatory information prior to making a treatment decision.

Originator: Craig S. Miller, DMD, MS
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PURPOSE

The American Academy of Oral Medicine (AAOM) affirms that treatment of dental patients should encompass recognition of infectious diseases that can manifest in the orofacial region, implementation of disease management, and prevention of disease transmission. Furthermore, the AAOM recommends education and training on infectious diseases and procedures that reduce the risk of disease transmission and that provide for disease control within the dental setting.

METHODS

This statement is based on a review of the current literature related to dental care for the patient with an oral herpetic lesion. A MEDLINE search was conducted using the terms “herpes,” “herpes simplex,” “disease control,” “transmission,” and “dentistry.” Expert opinions and best current practices were relied upon when direct evidence was not available.

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BACKGROUND

Viral infections in the oropharynx are common. One widespread viral pathogen that infects the epithelium of this region is herpes simplex virus (HSV). Primary HSV infections are frequent in infants, children, and adolescents and less common in adults.¹⁻³ During the primary infection, the virus replicates in the epithelium of the lips, face, and oral mucosa, and then the progeny penetrate the basal epithelium and infect the peripheral nerve endings.^{1,4} In the first few days of the infection, virions are transmitted to the trigeminal ganglion, where HSV enters a latent-like state for the life of the host.⁵ Periodically, the virus reactivates and migrates peripherally via nerve axons to the skin or the mucosa, where it reappears subclinically or as a recurrent lesion (e.g., herpes labialis or intraoral recurrent HSV infection). Primary and recurrent HSV lesions are infectious and can serve as a source of transmission.⁶ Spread of HSV from patients to dental health care workers and from dental health care workers to patients has been reported.⁷⁻⁹

Dentists are responsible for the proper evaluation and risk assessment of their patients as well infection control in the health care setting. Thus, recognition of viral infections, knowledge of standard precautions, and implementation of prevention strategies are important components of the infection control process. Clinicians should be aware that *primary HSV infection* generally appears as multiple vesicles or ulcers on the lips, perioral skin, gingiva, tongue, or oral mucosa. During the first week of the primary infection, the virus replicates and spreads. The initial viral infection is accompanied by inflammation and can lead to coalescing and bleeding ulcers that are painful. Difficulty in eating or swallowing is common. Regional lymphadenitis, fever, and malaise are often present.

Recurrent HSV infection generally appears as single vesicles or a small cluster of vesicles that rupture quickly, forming ulcers. The ulcers usually occur on the keratinized epithelium of the hard palate and gingiva.

Herpes labialis generally appears as a cluster of vesicles on the lips or the perioral region. Recurrent herpetic lesions generally erupt episodically at or near the site of the primary infection and may be induced by a variety of factors, including trauma, stress, fever, and outdoor exposures. HSV recurrences are generally self-limiting; however, recurrent infections can trigger

erythema multiforme¹⁰ and can spread and be more severe in immunosuppressed patients.^{11,12} Patients can shed HSV in their saliva during periods when lesions are present and in between recurrences when lesions are not present.

In summary, clinicians should be aware of the following:

1. The oral cavity and saliva contain potentially infectious material (i.e., viruses).^{13,14}
2. HSV has a predilection for the oral cavity.
3. HSV recurrences are common in and around the oral cavity.
4. HSV lesions proceed through several stages before healing. The usual stages are prodrome, macule, papule, vesicle, ulcer, scab, healed area with redness, and complete healing.
5. HSV lesions are infectious during the vesicle and ulcer stage (i.e., until the scab stage).
6. Measures should be implemented to prevent the spread of infection.
7. Antivirals can block replication of HSV-1 if prescribed early in the course of infection and at the appropriate dose.

POLICY STATEMENT

1. The AAOM recognizes that
 - A. risk assessment involves visual inspection of the patient before the delivery of dental treatment, and clinicians should recognize the clinical features of viral infections, such as HSV infection.
 - B. viral infections in and around the oral cavity can serve as a source of contagion and are a potential occupational hazard to the dental team and other patients.
 - C. clinicians should implement strategies that limit the recurrence of oral and perioral HSV infection.
2. The AAOM recognizes that
 - A. standard precautions should be implemented that protect the health care provider and patient from the spread of infection per published guidelines.¹⁵⁻¹⁷ This includes
 - 1) wearing of personal protective equipment during the treatment of patients
 - 2) avoiding the manipulation of tissues infected with HSV
 - 3) implementing airborne precautions, that is, minimizing the use of aerosolizing agents and devices (e.g., handpiece, ultrasonic scaler, and air polisher) around HSV lesions¹⁵⁻¹⁷
 - 4) avoiding the use of petrolatum products on active HSV lesions that contain fluids or are emanating fluids (i.e., prior to the scab stage)

3. The AAOM recognizes that
 - A. delaying care until an HSV lesion is scabbed over or completely healed is prudent for minimizing recurrences and spread of the infection, and that the presence of an infectious HSV lesion orally or periorally can be a reason for deferral of care.
4. The AAOM recognizes that
 - A. antiviral agents can be provided to help prevent recurrent herpes lesions, shorten lesion duration, and reduce pain.^{18,19}
 - B. the administration of antiviral agents is likely most beneficial when taken within 72 hours of lesion eruption.²⁰
 - C. use of topical anesthetics, anti-inflammatory agents, and analgesics can help reduce the pain of recurrent herpes lesions.

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