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Letter to Editor (Pages: 13113-13115)

Recurrent Herpes Labialis in Children and Dental Health Workers

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Abstract

One of the most common lip lesions pediatricians and pedodontists may encounter is recurrent herpes labialis. Herpes Virus Type 1 is from the herpes virus family. Contact with infectious secretions of the mucosa of the mouth, skin, and eyes can lead to primary infection. Primary HSV-1 infections are subclinical and generally occur in children, teenagers, and young adults. Reactivation of the virus can cause an asymptomatic release of the virus into saliva and oral secretions, which is itself an important risk factor for the transmission of the disease. Herpetic whitlow, recurrent herpes labialis, and herpes keratitis are usually caused by reactivation of this virus. Recurrent herpes labialis infection is a potential professional risk for oral health care workers. The purpose of this letter was to inform health professionals about the clinical symptoms, complications, and treatment of the herpes virus.

Key Words: Children, Herpes Keratitis, Herpetic Whitlow, Recurrent Herpes Labialis.

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Dear Editor,

Lip lesions are common in children. These lesions are often benign in children, without significant morbidity. The pediatricians and pediatric dentists have an important role in diagnosing and management of various types of labial lesions. One of the most common lip lesions is recurrent herpes labialis (1). Herpes Virus Type 1 (HSV1) is from the herpes virus family. HSV1 usually presents as a primary infection, with periods of latency and a tendency to relapse. Primary manifestations can vary from a mild period of fever to the oral ulcers that appear after vesicles. The majority of primary HSV-1 infections are subclinical and generally occur in children, teenagers, and young adults. Contact with infectious secretions of the mucosa of the mouth, skin and eyes can lead to primary infection. After the initial infection, the virus moves along the axon pathway of the sensory nerves and remains in the nerve ganglion. Reactivation of the virus can cause asymptomatic release of the virus into saliva and oral secretions, which is itself an important risk factor for the transmission of the disease. Fever, ultraviolet radiation, trauma, stress and menstruation are important triggers for virus activation (2).

Pediatric Recurrent herpes labialis (RHL) prevalence ranges from 0.72% to 5.2% dependent on the study population and the methods used to diagnose (3). These ulcers are accompanied by symptoms of prodromal stage, such as itching, tingling, or burning, followed by papules and vesicles on the lips. Pain is often present within the first two days. The RHL is self-limiting. Using topical antivirals reduces virus release and reduces pain, size and duration of lesions. Topical antiviral drugs such as acyclovir cream 5% and penciclovir 1% will be effective if taken 8 times daily in the prodromal phase or with the first sign of lesion onset. The dose of acyclovir family drugs should be determined based on age and renal health (2, 4). RHL infection is a potential professional risk for oral health care workers. Their risk of infection is principally high when aerosols are produced by high-speed rotary and ultrasonic instruments even if the patient has subclinical HSV infection. The elective dental and oral treatment of patients with active RHL should be delayed until lesion healing, because it can affect the skin (herpetic whitlow) and the cornea (keratitis) (2).

Herpetic whitlow is an infection caused by herpes simplex virus 1 or 2, its clinical manifestations include painful erythema and vesicles in the finger. Health workers and children are more affected than others. Herpetic whitlow in children occurs from direct inoculation (patient or parent) following primary oral herpes infection. In adults, the transmission may be due to touching an active herpes lesion with the injured finger. Herpetic whitlow is self-limiting but in subjects with severe lesions and high recurrence it is best to be treated with long-term antiviral drugs. Misdiagnosis can lead to cross-infection lesion and surgery can delay the recovery course and cause secondary infection (5).

Herpetic whitlow diagnosis is clinical and the treatment is supportive. The role of antiviral agents is still controversial. For most healthy subjects, the infection recovers in 2 to 4 weeks. Until the recovery of the lesion, there is viral shedding, so patients should be advised about the importance of wearing gloves or other preventive barriers. Risk of recurrence is about 30% to 50% (5). Herpes keratitis is usually caused by touching the active herpes lesion on the lips and transferring it to the eye. Another way to transfer the virus to the dentist is through aerosols infected with the virus during dental treatment. Wearing protective glasses, even with shields, may

protect against direct spray of the virus, but protection against aerosol-containing viruses is still in doubt (6). Herpes keratitis is one of the most common causes of blindness in the world (2).

CONCLUSION

Reactivation of the HSV virus can cause an asymptomatic release of the virus into saliva and oral secretions, which is itself an important risk factor for the transmission of the disease. Herpetic whitlow, recurrent herpes labialis, and herpes keratitis are usually caused by reactivation of this virus.

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