COMMENTARY

Treatment of Herpes Labialis: Comparison of Two OTC Drugs and Untreated Controls

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"The treatment of herpes labialis: Comparison of two OTC drugs and untreated controls" is an interesting study of two over-the-counter (OTC) antiviral medications and provides some perspective relative to the management of secondary extraoral herpes simplex infections (herpes labialis). But, as with all medical management studies, it assumes a correct diagnosis. This is not always the case with herpetic lesions, especially recurrent intraoral lesions. Please allow me a mini-primer on herpes simplex infections and aphthous ulcers.

Herpes viruses are a common human virus. This large group of viruses is DNA based and infects specific cells in the body. There are a variety of herpes viruses that infect humans and many more that infect animals. The virus most commonly seen by oral healthcare professionals is the herpes simplex type I, which is common to oral facial structures. Herpes simplex type 2, which commonly infects the genital region, can also occur in the oral area (the mechanism of how such a cross infection occurs is beyond the scope of this commentary). In the oral cavity, both of these viruses present the same and are treated the same, so it is not necessary to identify the type unless the patient would like to know. In that case, the virus can be typed with a laboratory test.

Herpes simplex type I is a common childhood disease and, as noted in the article, infects about 70 to 90% of the population. The classic symptoms of the primary infection are diffuse oral cavity ulcers, lymphadenopathy, and fever. The patient gets worse for a week, better for a week, and it is over. Other patients will get a sub-clinical infection, where they are uncomfortable, a bit irritable and uncooperative, an average day for many children, so the primary infection passes unnoticed.

During that initial infection the virus takes up residence in neuronal cells (the viral DNA integrates with the neuronal cell DNA) and can lie dormant until triggered by ultraviolet light or other stimulants, to create a secondary attack.

Secondary attacks most commonly occur on the lip, but can occur inside the mouth. When the secondary attack occurs inside the mouth it occurs almost exclusively on attached mucosa, i.e., the attached gums or roof of the mouth.

Aphthous ulcers, another recurrent intraoral lesion occurs only inside the mouth and almost exclusively on unattached mucosa. Aphthous ulcers are considered an autoimmune disease and are not an infection. Over-the-counter aphthous ulcer management consists of material to physically cover the lesion or to numb it or to do both. Prescription medications are primarily corticosteroids to block the autoimmune inflammatory response.

Distinguishing between the two lesions, i.e., making a correct diagnosis, is the first crucial step in proper management.

As noted, this article focuses on the management of extraoral secondary herpes simplex infections. These extra oral lesions usually start as a tingly or altered sensation at the site where they will occur. This is termed the prodromal phase. As the viruses replicate and increase in numbers, blisters will appear, usually within 12 to 24 hours, along with increasing pain, neuritis. These blisters will burst within another 24 hours, leaving a painful crusty swollen lesion, which will last from 5 to 10 days.

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The most important time to stop or minimize a herpes attack is as early in the attack as possible, since that is when the least number of virus particles are present. Based on that, the patient should have any medication, OTC or prescription, available to be used at the first sign of a secondary attack.

There are a variety of medications available, OTC and prescription. The different medications effect the replication of the virus through different mechanisms. The primary antiviral prescription medications, acyclovir and valacyclovir, interfere with the replication of the viral DNA; the two OTC medications in the article either directly destroy the virus cell wall, the Viroxyn or prevent the viral particles from migrating and infecting subsequent human cells, Abreva. As with all infections, the final eliminator of the infection is the patient's immune system.

An interesting aspect of this article is the method of evaluation. They use the current methodology required by the Food and Drug Administration (FDA) for such evaluations, which evaluates the real life experience of the patient. Based on that, as oral healthcare professionals, we can assume that our patients will have a similar experience to the subjects in the article, so the conclusions of the article should be applicable in private practice.

The article is worth reading for a variety of reasons; it provides an education relative to herpes simplex infections and understanding of the current evaluation techniques used by the FDA to evaluate OTC drugs, in general. It also allows you to familiarize yourself with two effective secondary extraoral herpes simplex drugs, Viroxyn and Abreva, which you can recommend for your patients who get such lesions. Given their different mechanism of actions and their safety profile you and your patient may even elect to use these OTC drugs in conjunction with a prescription antiviral drug.

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