

SELECTING ANTIVIRAL THERAPY FOR COLD SORES

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Introduction^{1,2}



Herpes labialis³

Herpes labialis, more commonly referred to as cold sores, are a viral infection caused by the herpes simplex virus type 1 (HSV-1). Cold sores are characterized by the appearance of small, painful and pruritic fluid-filled clusters of blisters or vesicles on or around primarily the lips, mouth, or nose. The blisters may merge, burst, and leave sores that ooze and crust over. HSV-1 can be transmitted via contact with infected mucosal secretions or herpetic lesions. Transmission of the virus is more likely to occur during symptomatic episodes when the viral burden is higher, however it can still be transmitted even if the source is asymptomatic. After the primary infection resolves, the virus can become dormant and may cause recurrent episodes about one to six times per year.

Primary infection in adults: Symptoms typically present 2-12 days after exposure and may include several painful orolabial lesions with local lymphadenopathy and pharyngitis, as well as systemic symptoms (e.g fever, malaise). Referral needed.

Recurrent infection in adults: Many patients experience prodromal symptoms (e.g tingling, burning, pain) about 24-48 hours prior to the appearance of the first vesicle. Recurrences typically present as orolabial ulcerations at the vermilion border. In the absence of treatment, vesicles begin to crust in 7-10 days.

Oral antiviral therapy is most effective when initiated in the **prodromal period** (first 48 hours of symptom onset)

Minor ailment prescribing **helps increase access to care** for patients to make it easier to start their antivirals as soon as symptoms begin



- **Trigger avoidance:** emotional stress, fatigue, sun exposure to prevent recurrences
- **Cool compresses** which may help reduce swelling and pain
- **Systemic analgesics** (e.g NSAIDs, acetaminophen) for a maximum of 3 days
- **Topical anaesthetics** (e.g benzocaine, lidocaine)
- **Topical anti-histamines** (e.g pramoxine)

TYPICAL PRESENTATION^{1,2}

BENEFITS OF RPH INTERVENTION¹

SELF CARE¹

TOPICAL THERAPIES^{1,4}

- **Docosanol 10%** is an over-the-counter topical therapy marketed for the treatment of cold sores. It works by inhibiting the fusion between the herpes virus envelope and the plasma membrane, blocking viral entry into cells. It may **decrease duration of painful symptoms and time to healing by 17-79 hours** and is best used **as soon as prodromal symptoms present** (defined above). It is generally well-tolerated and may cause mild stinging. Docosanol may be an option for patients who prefer topical therapy, however it requires frequent application.
- **Directions for use:** Apply to affected area at the first sign of pain, itching, burning, redness or tingling 5 times daily for 5-10 days

- **Acyclovir 5% cream** is a prescription topical therapy marketed for the treatment of cold sore infections. It may be less effective than oral antivirals, may carry a risk of self-infection, and require many applications. **If started within 1 hour of the onset of a recurrent episode**, then acyclovir 5% cream when compared to placebo, **may reduce the duration of pain by about half a day**. It is **not expected to prevent progression to ulcers, vesicles, and/or crusts**. **Topical Acyclovir ointment may not be as effective**. But in general topical agents are not recommended, and are less effective.
- **Directions for use:** Start within 1 hour of onset of signs of symptoms. Apply the cream 5 times daily during waking hours for 4 days.



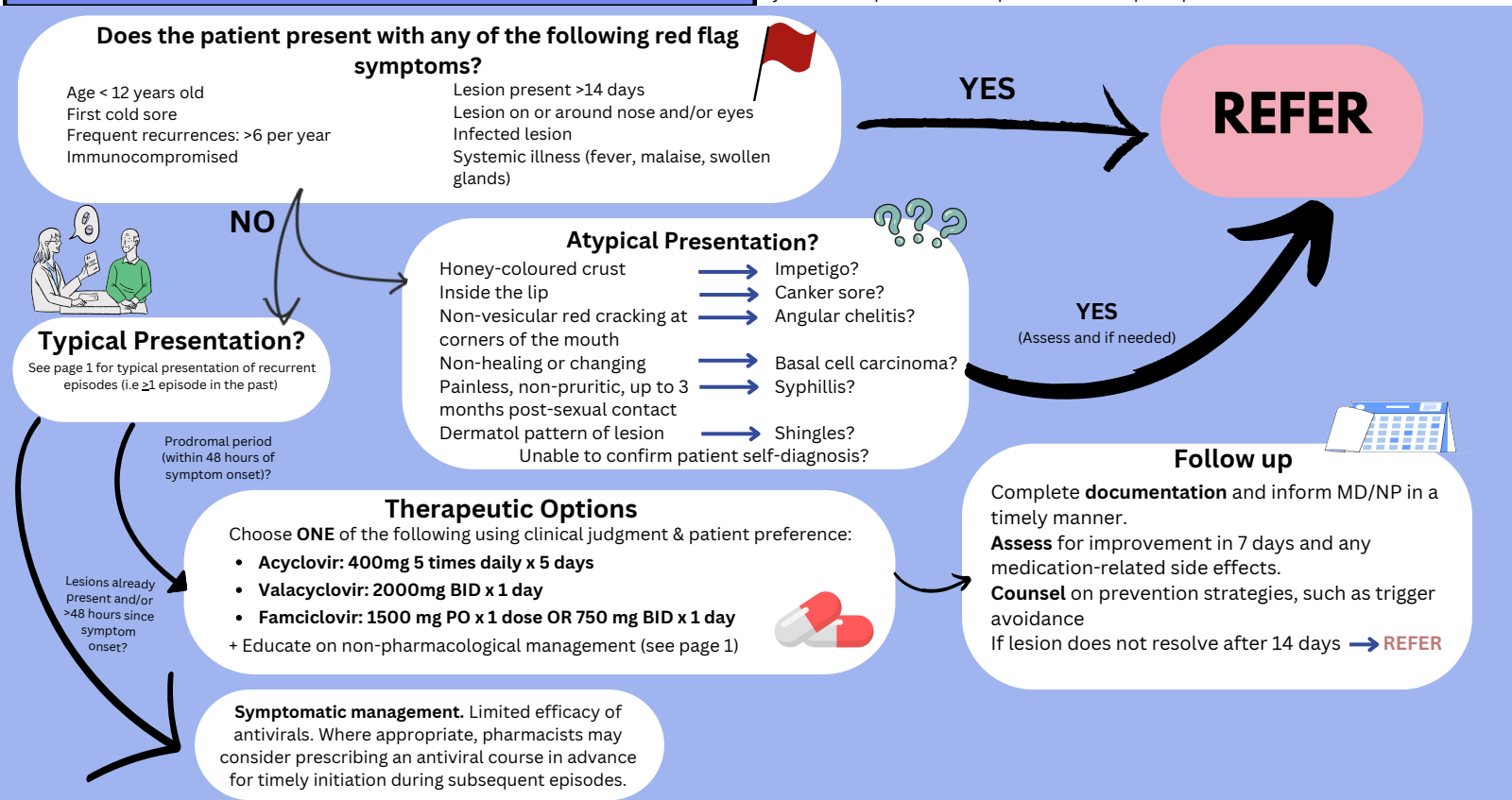
Anti-Viral Treatment Alternatives



	Valacyclovir: ¹ 2000mg BID x 1 day	Acyclovir: ¹ 400mg 5 times daily x 5 days	Famciclovir: ¹ 1500mg x 1 dose or 750 mg BID x 1 day
Indication	Health Canada approved indication for treatment of herpes simplex	No Health Canada approved indication for treatment of herpes simplex although clinical evidence to support use for this indication exists	
Efficacy 	All appear to decrease time to heal by 1-2 days Decreases duration and severity of episodes if taken in prodromal period, ideally within 48 hours of symptom onset. Once lesions have appeared, efficacy of antivirals appears limited. In recurrent infections, valacyclovir appears to improve time to healing and resolution of pain compared to acyclovir All are more effective than topical antivirals in reducing time to healing		
Safety 	Caution in impaired renal function Common S/E: headache and nausea Well tolerated	Approved by Health Canada for use in children > 2 years of age (though not officially indicated to treat herpes labialis) Caution in impaired renal function Common S/E: Headache, nausea Well tolerated	Caution in renal impairment Common S/E: headache, nausea Well tolerated
Adherence 	Twice a day dosing convenience Can be taken without regards to meals	Longest duration and frequency of dosing compared to alternatives Can be taken without regard to meals Most expensive option	Single dose administration convenience Can be taken without regards to meals

Prescribing Algorithm^{1,5}

*Note: Minor ailment prescribing is appropriate when the RPh has the necessary skills and knowledge to conduct an assessment and prescribe therapy, and when the jurisdiction permits it as a part of their scope of practise.



References

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