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I. Therapeutic Regimen for Common Acute Oral Mucosal Diseases

Recurrent Herpes Simplex

Topical Treatment for Herpes labialis

Prescription Products

Penciclovir (Denavir – trade name) 1%

Disp 2gm tube

Sig apply q 2h beginning in prodrome during wake hours for 4 days

Note: inhibits viral replication

External use only

OTC Products

1. Docosanol cream 10% (Abreva trade name)

Apply to affected area 5 times/day

prevents viral entry into cell and replication

external use only

2. Zilactin-B, qid (adhesive gel, 10% Benzocaine, tannic, boric and salicylic acids, benzyl alcohol)

3. Sunblock

Systemic Antivirals for Herpes Simplex and Varicella Zoster Viruses

How Supplied

Acyclovir 200mg,400mg,800 mg tabs, 200mg/5ml suspension (Thirty 400mg tabs \$20)

Valacyclovir (Valtrex) 500mg, 1000mg tabs (Thirty 500mg tabs is \$200)

Mechanisms of action

Acyclovir is activated by viral thymidine kinase. The antiviral activity of acyclovir is primarily against herpes viruses (e.g., herpes simplex virus [HSV] and varicella-zoster virus [VZV]); although, it has limited efficacy against cytomegalovirus (CMV) and Epstein-Barr virus (EBV). The selective activity of acyclovir is due to its affinity for the thymidine kinase enzyme encoded by HSV and VZV. Acyclovir is approximately 10-times more potent against HSV-1 and -2 than against VZV. It has even less activity against CMV and EBV. The effectiveness of acyclovir against EBV is limited to actively infected cells; latent or persistent EBV infection is not affected. Acyclovir is not effective against the human immunodeficiency virus. Clinically, acyclovir is used in the treatment of herpes simplex, herpes genitalis, and herpes zoster infections. The FDA approved acyclovir in March 1982. It is available as oral, parenteral, and topical formulations.

Mechanism of Action: Acyclovir inhibits viral DNA synthesis. Acyclovir must be phosphorylated intracellularly to be active. Acyclovir is converted to the monophosphate by viral thymidine kinase, then to diphosphate by cellular guanylate kinase, and finally to the triphosphate by various cellular enzymes. Acyclovir is effective only against actively replicating viruses; it does not eliminate the latent herpes virus genome.

Patients with hepatic impairment:

No dosage adjustment needed.

Patients with renal impairment:

Serum creatinine clearance based dosage adjustments

Acute Herpetic Gingivostomatitis: Pediatric

- Acyclovir suspension started in first 3 symptomatic days
15 mg/kg up to adult dose of 200mg (kids 2-12 yo)
Rinse and swallow
5 times daily for 5 days
Supportive and Symptomatic
- Bed rest and forced fluids
- Soft diet with dietary supplementation if necessary e.g. Sustecal
- For fever, Acetaminophen (not aspirin)
- Avoid spreading to eyes

Recurrent herpes labialis or intraoral recurrent herpes for ADULTS

- Valtrex
2g on recognition of symptoms followed by 2g 12 hours later
- Acyclovir
400mg 5 times daily for 5 days begun on recognition of symptoms

Recurrences of HSV associated with dental care

- Valtrex
2g taken twice on day on procedure and 1g taken twice the next day

Recurrences of HSV associated with prolonged trigger (eg a beach vacation)

- Valtrex 1g daily
- Acyclovir 400mg twice /day
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Long term suppressive therapy (6 or more recurrences of HSV/year or HSV triggering erythema multiforme)

- Acyclovir 400mg bid
Reassess at 1 year
- Acyclovir 200mg 3-5x/day
Reassess at 1 year
- Valtrex 500mg qd (remember “qd” is once every day)
Reassess at 4 months

Recurrent herpes labialis (topical cream)

- Penciclovir (Denavir) 1% (\$43.00)
1.5 g tube
Apply q2h x 4 days

Begin at first symptoms

For chickenpox (primary VZV) – not a common dental presentation

- Book says antivirals still reserved for immunocompromised , people over 13 years old and pts with a history of family members with VZV
- Remember VZV vaccine now given to children
- Rec refer to pediatrician/physician

For Shingles (secondary VZV) – can mimic dental pain

- Valtrex
1g tid for 7 days begun in first 48-72 hours
- Adults over 60 shingles vaccine recommended by CDC in May 2008 publication

II. Therapeutic Regimen for Common Chronic Oral Mucosal Diseases
e.g. Recurrent Aphthous Stomatitis

Chronic vesiculo-ulcerative disease

Lidex (fluocinonide) ointment 0.05%

Disp: 15g.

Sig: Apply 6 times daily

Temovate (clobetasol dipropionate) ointment 0.05%

Disp: 15g

Sig: Apply tid.

Note: These potent topical steroids, as well as oral (systemic) steroids may put patient at risk for an iatrogenic infection. (usually candidiasis or HSV if the pt is otherwise healthy)

For severe forms of chronic vesiculo-ulcerative disease,(e.g. erosive lichen planus after biopsy) may need to use short (1-2 weeks) term systemic steroid therapy- may need to consult with patient's physician particularly if patient is diabetic, hypertensive or already immunosuppressed.

Prednisone 10 mg tabs

Disp : 28 tabs

Sig: take 4 tabs in the morning

III. Therapeutic Regimen for Oral Candidiasis

Mycelex (clotrimazole) troches

Disp 70 troches

Sig: allow troche to dissolve in mouth slowly 5 times a day for 14 days

Nystatin ointment

Disp 30g tube

Apply to denture base and insert in mouth tid

Nystatin 100,000 U/ml (Mycostatin –trade name) oral suspension

Disp: 240 ml

Rinse with 4ml qid for 2 minutes and swallow for 14 days

Do not eat or drink for 30 minutes after application

Angular Cheilitis

Vytone or Alcortin A cream 1% (Iodoquinol-HC) (contains hydrocortisone and iodoquinol which has antibacterial and antifungal properties)

Disp: 1 oz. tube

Sig: Apply to affected areas qid

*Oravig (miconazole) Buccal tablets 50mg (FDA approved in 2010)

14 tabs

Apply 1 tablet to the upper gum once daily in morning for 14 days.

Do not crush/chew/swallow

*Diflucan (fluconazole), 100mg tabs

16 tabs

Take 2 tabs on first day, then 1 tab daily for 14 days

*Warning many drug-drug interactions