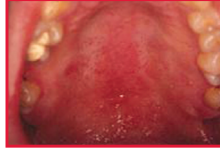


Angular Cheilitis



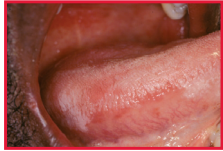
Pseudomembranous Candidiasis



Erythematous Candidiasis



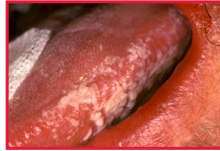
Hyperplastic Candidiasis



Hairy Leukoplakia



Hairy Leukoplakia



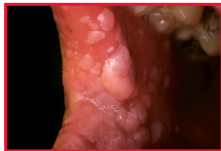
Hairy Leukoplakia and Candidiasis



Hairy Leukoplakia on Tongue & HPV on Lip



Human Papilloma Virus (HPV)



Human Papilloma Virus (HPV)



Herpes Zoster Varicella Virus



Aphthous Ulcer



Linear Gingival Erythema



Periodontitis



Kaposi's Sarcoma



Kaposi's Sarcoma



Kaposi's Sarcoma



HSV and Candidiasis



Ecchymosis

With onset of HAART and reconstitution of the immune system, most of these manifestations should not be present in the patient's mouth. If oral manifestations associated with HIV/AIDS are observed in a patient using HAART, a medical referral should be considered for evaluation of possible HAART failure or progression of the disease.

## THERAPEUTIC AGENTS FOR ORAL MANIFESTATIONS OF HIV DISEASE

Consult PDR or pharmacology text for more information regarding indications, contraindications and adverse reactions.  
**Note:** Treatment regimens vary with each patient according to severity of patient's condition and immune status.

### MEDICATIONS LISTED IN ALPHABETICAL ORDER:

#### Antifungal<sup>1</sup>

- Clotrimazole troches (10 mg, Mycelex<sup>®</sup>): Dissolve one troche 5 times daily for 14 days
- Fluconazole (100 mg, Diflucan<sup>®</sup>): 1 tab po once daily with or without food for 10-14 days. Due to the development of resistant strains, suppressive therapy is discouraged.
- Ketoconazole (2% cream, Nizoral<sup>®</sup>): Apply to corners of mouth qid
- Miconazole mucoadhesive buccal tab (50 mg buccal tab, Oravig<sup>™</sup>): Apply to the upper gum region (canine fossa) in the morning once daily after brushing teeth for 14 consecutive days<sup>2</sup>
- Nystatin ointment (100,000 units/g): Apply to commissures of mouth or denture base after meals
- Nystatin pastilles (200,000 units, Mycostatin<sup>®</sup>): Dissolve one tab slowly in mouth 5 times per day for 10 days
- Nystatin suspension (100,000 units/mL): 4-6 mL po swish and spit qid
- **Fluconazole resistance:** Itraconazole oral solution 200 mg once daily for 3 days then 400 mg po for up to 28 days or posaconazole oral suspension 400 mg po bid for 3 days, then 400 mg daily for up to 28 days.<sup>3</sup>

#### Antiviral<sup>1</sup>

- Herpes Simplex Virus (HSV):
  - Acyclovir tab: 400 mg po tid for 7-10 days (for mild HSV)
  - Famciclovir: 500 mg po bid
  - Valacyclovir: 1 g po bid
- Varicella zoster virus (VZV) (treat 7-10 days):
  - Acyclovir tab: 20 mg/kg body weight up to a maximum of 800 mg. If severe or disseminated, in-patient therapy with IV acyclovir.
  - Acyclovir: 800 mg po 5 times daily
  - Famciclovir: 500 mg po tid or
  - Valacyclovir: 1 g po tid or
  - **Acyclovir resistance:** Foscarnet: 40-60 mg/kg IV every 8 hrs<sup>3</sup>

#### Topical Corticosteroids for Aphthous Ulcerations

- Fluocinonide ointment 0.05% (Lidex<sup>®</sup>) 50:50 with Orabase<sup>®</sup>: Apply small amount on a cotton swab to affected areas after meals and at bedtime as needed. Press medication onto the area, but do not rub medication into the tissue.
  - Clobetasol propionate 0.05% ointment: Using a sterile cotton swab, apply to ulcers bid.
  - Decadron<sup>®</sup> elixir (dexamethasone 0.5 mg/5 mL): Rinse 5 mL for 2 min qid then expectorate (for multiple lesions).
  - Lidex<sup>®</sup> gel/ointment 0.05%: Apply to affected areas after meals and at bedtime.

#### Systemic Corticosteroids for Severe Major Aphthous Ulcerations or Refractory Aphthous

- Prednisone: 20-40 mg once daily po for 1-2 weeks, then taper. Biopsy prior to treatment should be considered. Consult primary care physician before prescribing.

#### Antibacterial Agents for Aphthous Ulcerations

- Chlorhexidine gluconate oral rinse 0.12% (Peridex<sup>®</sup> or PerioGard<sup>®</sup>): Rinse with 15 mL for 30 seconds bid and spit out the solution for 1-2 weeks.
- Tetracycline suspension: 125 mg/mL – swish for 1-2 minutes and expectorate bid.

#### Topical Anesthetics and Coating Agents for Oral Ulcerations

- Benzocaine in Orabase<sup>®</sup>: Apply a small amount with a cotton swab to the affected area as needed for pain. Caution with allergy to esters or Novocain.
  - Benadryl<sup>®</sup> elixir (12.5 mg/5 mL): Swish with 5 mL for two minutes every 2 hrs and before meals, expectorate.
  - Benadryl<sup>®</sup> elixir + Kaopectate (or Maalox<sup>®</sup>), 50:50 mixture: Swish with 5 mL every 2 hrs and before meals, expectorate.
- Viscous lidocaine 2%: Swish with 5 mL before meals and expectorate. Caution: gag reflex may be lost, aspiration is possible.

#### Oral Hairy Leukoplakia

- Generally asymptomatic, no treatment required. Usually resolves with onset of Highly Active Antiretroviral Therapy (HAART).

#### HIV Related Gingivitis and Periodontitis

- Betadine 10% solution (Povidone-iodine): Used during scaling and root planning.
- Chlorhexidine gluconate 0.12% (Peridex<sup>®</sup> or PerioGard<sup>®</sup>): Rinse with 15 mL bid for 30 seconds and spit out for 1-2 weeks.
- Metronidazole (Flagyl<sup>®</sup>): 250 mg tid for 7-14 days (avoid if severe hepatic disease, alcoholic beverages or pregnancy) or Clindamycin 300 mg tid for 7-14 days.
- May consider prescribing antibiotics plus an antifungal agent.

#### Xerostomia

- Lubricants: artificial saliva substitutes, Oral Balance<sup>®</sup> ointments.
- Salivary stimulants: sugarless gum, sugarless hard lozenges.
- Systemic sialogogues: Pilocarpine (Salagen<sup>®</sup>) - Consult primary care physician before prescribing.

#### Reference:

1. Centers for Disease Control and Prevention. (2009, April 10). Guidelines for prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: Recommendations from CDC, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. MMWR, 58 (No. RR-4), 155, 160-161.
2. Oravig<sup>™</sup> [package insert]. Woodcliff Lake, NJ: Strativa Pharmaceuticals, a Division of Par Pharmaceutical, Inc.; 2010.
3. Bartlett, J.G., Gallant, J.E., Pham, P.A., & Johns Hopkins University School of Medicine. (2009). Medical management of HIV infection 2009-2010. Durham, NC: Knowledge Source Solutions, LLC, 2009.

#### Editors:

- Carol M. Stewart, MS, DDS, MS  
UF College of Dentistry, Dental Director, Florida/Caribbean AIDS Education and Training Center
- Jeffrey Beal, MD, AAHIVS  
University of South Florida, PI/Clinical Director, Florida/Caribbean AIDS Education and Training Center
- Michael Thompson, PharmD  
Florida A&M University, Faculty, Florida/Caribbean AIDS Education and Training Center
- Cesar A. Migliorati, DDS, MS, PhD  
Professor and Chair, Department of Diagnostic Sciences and Oral Medicine, Director of Oral Medicine, University of Tennessee Health Science Center College of Dentistry

#### Managing Editor:

Theresa C. Skipper, MPH

#### Layout:

Maximo Lora, BA

#### Special Thanks to F/C AETC Staff:

Christina Bennett, BA  
for her review and contributions

To order additional copies or request an alternate format of this card:

866-352-2382

[www.FCAETC.org/Dental](http://www.FCAETC.org/Dental)

#### ALSO AVAILABLE FOR ORDER AND DOWNLOAD:

ARV Therapy in Adults & Adolescents

ARV Therapy in Pediatrics

Hepatitis C in HIV

Opportunistic Infections (OIs) in HIV/AIDS

Post-Exposure Prophylaxis (PEP) & Pre-Exposure Prophylaxis (PrEP)

Post-Exposure Prophylaxis (PEP) in Pediatrics/Adolescents

Treatment of Tuberculosis (TB) in HIV/AIDS

Treatment of STDs in HIV-Infected Patients

Up-to-date PDFs of the above resources are available online:

[www.FCAETC.org/Treatment](http://www.FCAETC.org/Treatment)

#### Dental Consultation and Technical Assistance Available on the Care of HIV/AIDS Patients in Florida, Puerto Rico, and the US Virgin Islands

Contact: Carol Stewart, MS, DDS, MS  
Dental Director, Florida/Caribbean AIDS Education and Training Center  
Professor, University of Florida College of Dentistry, Gainesville, Florida

352-273-6775

[cstewart@dental.ufl.edu](mailto:cstewart@dental.ufl.edu)

#### OTHER DENTAL RESOURCES AVAILABLE: Online Dental Education\* • HIV Oral Health CD Dental Charting Forms • Oral Health Indicator Tools

\*Free and Dental Issues Online Training available to give practical information on HIV/AIDS in an on-line self-study format. Visit [www.FCAETC.ORG/Dental](http://www.FCAETC.ORG/Dental) for more information

#### PEPLINE: National Clinicians' Post-Exposure Prophylaxis Hotline

888-HIV-4911 (888-448-4911)

#### Warmline: National HIV Telephone Consultation Service

800-933-3413