

Dental Management of the Patient with HIV/AIDS Current Concepts Patient Education "How to Care for Your Dentures"

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Introduction: U. S. Statistics

- The CDC estimates that 1,144,500 persons aged 13 years and older are living with HIV infection, including 180,900 (15.8%) who are undiagnosed. Over the past decade, the number of people living with HIV has increased, while the annual number of new HIV infections has remained stable. With advances in medications reducing opportunistic infections, people with HIV/AIDS are living longer. In terms of dentistry, there is the likelihood that some may eventually need dentures or partial dentures. The following module has been developed as a Patient Education **Resource**.
- Ref. 1. CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 U.S. dependent areas—2011. *HIV Surveillance Supplemental Report* 2013;18(No. 5). Published October 2013.



How to Care for Your Dentures

A Guide for People Living with HIV Disease

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Problems & Solutions for Denture Care

- Patients with HIV disease who wear dentures may experience certain oral health problems related to their dentures.
- This program will identify particular problems associated with dentures and explain how these problems can be managed.

How Many People Need Dentures?

- Between 7-69% of adults worldwide need dentures.
- In the U.S., approximately 26% of people between the ages of 65-74 need dentures.²
- However, people younger than 65 years of age may experience oral health problems resulting in the removal of teeth and replacement of the missing teeth with dentures.



Your New Dentures

- A few visits to the dentist may be necessary to adjust the fit of your new dentures.
- Never attempt to adjust your dentures yourself or bend any metal attachments if present.
 - Never use any over-the-counter glue to repair broken dentures.
- A professional dental lab may be required for certain repairs.



Adjusting to Your Dentures

- Dentures are not like your natural teeth.
- It may take time to adjust to eating and speaking with them. <u>Be patient</u>.
- Speak slowly at first until you are accustomed to the fit of the denture in your mouth.
- Eat soft foods, and chew slowly.
- When chewing, use both sides of your mouth at the same time. This prevents your denture from moving, slipping or tipping.³

Problems Seen in HIV+ Denture Wearers

1. Loose fitting denture due to weight loss

2. Ulcers (Sores) in the mouth resulting from rubbing or irritation of poorly fitting dentures

3. Biofilms which can cause Candidiasis (Thrush)

Cause: Loss of appetite due to:

- Side effects of medications
- Oral Candidiasis (Thrush)
- Difficulty swallowing
- Stomach problems (nausea; diarrhea)
- Depression
- Eating disorders ⁴

Loose Fitting Dentures Can Cause:

- Pain
- Difficulty eating
- Difficulty speaking
- Mouth ulcers (sores)
- Infection resulting from mouth sores

- Normal age related changes to the face, jaw bone and gums are also responsible for loose fitting dentures.
- Solutions to loose fitting dentures include:
 - Self- applied denture adhesives, such as paste, powders or soft liners.
 - Professional relining or adjustments to your dentures by your dentist





Benefits of Denture Adhesives

- Improves the ability to eat normally
- Improves the fit of dentures/ better bite
- Helps prevent food particles from getting under denture
- Improves comfort
- Improves self confidence and speech
- Reduce pain and limits chance of mouth infection from mouth sores



"Pea size" drops of adhesive applied to upper denture

How to Apply Denture Adhesives

Cream Adhesives:

- Clean & dry the denture
- Apply 3 or 4 "pea size" drops of adhesive to each denture
 - Caution: Only apply the recommended amount. Denture adhesives that contain *zinc* should be avoided. Consult with your dentist regarding safe products.

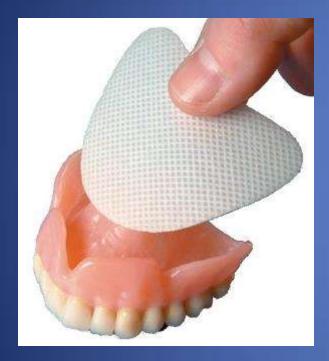
How to Apply Denture Adhesives



Powder Adhesives:

- Wet the denture with water
- Apply a thin layer of powder
- Shake off excess
- Caution: Denture adhesives that contain *zinc* should be avoided. Consult with your dentist regarding safe products.

How-to Apply Denture Liners/Pads



Liners & Pads/Strips:
Place correct size on denture
Remove excess liner with scissors

Following Adhesive Application

After applying denture creams, powders or soft liners/pads/strips:

- Put denture in mouth and bite firmly for 5-10 seconds
- Remove excess adhesive if necessary
- Caution: Consult with your dentist regarding safe products.

How to Remove Denture Adhesive





- Remove denture from the mouth
- Completely remove paste, powder adhesives or pad/liners daily
- Because dentures are softer than natural teeth abrasive cleaners should be avoided
- Soak dentures daily and clean with a soft brush and non-abrasive paste and/or effervescent tablet
- Rinse thoroughly before replacing in the mouth



Denture being professionally relined by the dentist

How Long Should you use Denture Adhesives?

- If increasing amounts of denture adhesive are needed for normal function, patients should see their dentist for a professional relining
- Recommendations include an evaluation every 6 months to insure no underlying problems exist. ³

Problem 2: Ulcers (Sores) resulting from rubbing or irritation of poorly fitting dentures can lead to infection (fungal or bacterial) or an overgrowth of tissue around the denture.



Canker Sore



Denture Stomatitis

Rubbing/irritation from poorly fitting dentures can cause:

- Canker sore (aphthous ulcer)
- Cold sores (fever blisters)
- Denture stomatitis –an inflamed and painful mouth. Often seen as small red dots or redness on the roof of the mouth under the upper denture.

Problem 2: Ulcers (Sores) in the mouth from poorly fitting dentures...cont'd.





In addition to mouth ulcers (sores), an *epulis (the overgrowth of tissue* around the edge of the denture) can also form as a result of from rubbing from a poorly fitting dentures. Continued irritation can cause a "traumatic ulcer" in the folds of the epulis. The epulis must be surgically removed and the denture professionally relined or a new denture may need to be made.

Overgrowth of tissue around upper denture

Photos courtesy of Dr. Valli Meeks

Problem 2: Ulcers (Sores) in the mouth from poorly fitting dentures...cont'd.



Traumatic ulcer in the folds of the epulis from continued irritation of ill-fitting denture Continued irritation can cause a "traumatic ulcer" in the folds of the epulis. The epulis must be surgically removed. The denture may need to be professionally relined or a new denture may need to be made.

Photos courtesy of Dr. Valli Meeks

Problem 3: Biofilms which can cause Candidiasis (Thrush)

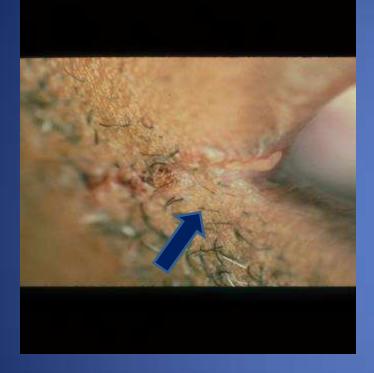


Thrush in a Denture Patient

A *biofilm* is an invisible film that forms on the surface of a denture. Biofilms can cause fungal infections like oral candidiasis (Thrush) or Cheilitis (Thrush in corners of the mouth)^{3, 9}

- The most common sign of oral thrush is white patches or plaques on the tongue, roof of the mouth or inside the mouth on the cheeks. Wearing a denture continuously has been identified as a primary reason for Thrush. Therefore always remove dentures before going to bed.
- Certain medications can also cause thrush.
- Thrush can also spread to other areas such as the throat and lungs. ^{3, 8}

Problem 3: Biofilms which can cause Candidiasis (Thrush) cont'd.



Biofilms can also cause Cheilitis or Thrush in corners of the mouth^{3,8}

Cheilitis in the corner of the mouth in a Denture Patient

Photos courtesy of Dr. Valli Meeks

Problem 3: Biofilms which can cause Candidiasis (Thrush) cont'd.



Regular cleaning removes biofilm & reduces bacteria

Recent Research on Oral Bacteria

- Research suggests that certain oral bacteria may cause infection in the heart, lungs and other areas of the body. ^{5,6} It may also directly affect the function of the immune system. ⁷
- Cleaning the denture regularly helps to remove biofilms and therefore reduce bacteria and other disease causing organisms
 - Cleaning and removing dentures daily helps to control these problems and remove stains; however, toothpaste should not be used to clean dentures ^{2, 5}

Problem 3: Biofilms which can cause Candidiasis (Thrush) continued.





Treatments for Thrush

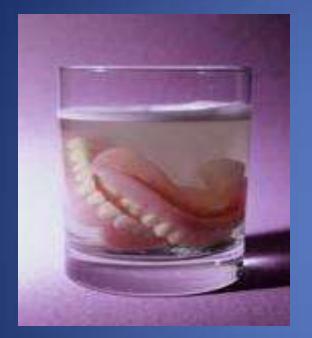
Medications for Thrush can be prescribed as a pill to be swallowed, a cream to be directly applied to the affected area in the mouth as well as the denture, or as troches (lozenges) to be dissolved in the mouth. The type of medicine prescribed depends on the patient's health status and the severity of the fungal infection. Oral hygiene instructions as well as dietary recommendations should also be discussed with the patient. ¹⁰



Ultrasonic cleaning of your denture by the dentist or dental lab removes stain and tartar.

How Long Should Your Denture Last?

- Daily care and proper use can make them last for at least 5-7 years, before a replacement is necessary.
- Even denture wearers should see the dentist regularly; every 6 months is recommended to insure a healthy mouth. ¹²



Benefits of Denture Cleaning

- Rinse dentures after each meal/ Never boil dentures in water
- Store dentures in water after cleaning to avoid warping (avoid hot water)
- Cleaning removes stains and prevents build up of biofilm and bacteria
- Cleaning also prevents denture stomatitis (sores or ulcers in the mouth)



Brushing the tongue helps to reduce bad breath.

Oral Health Care

- Patients with dentures should also clean their mouth (inside of the cheeks), palate and tongue with a soft bristle tooth brush daily before inserting their denture.
- This removes plaque and improves blood circulation to the mouth.
- Rinsing the mouth daily with warm water or mouthwash (alcohol-free recommended) helps prevent bad breath.
- Caution: because it is abrasive, toothpaste should not be used to clean dentures ^{2, 6}

Everyone Benefits from Good Denture Care



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