Oral Problems
Conditions that can affect oral care in palliative care residents include:

- Dry mouth as a side effect of medical conditions and medications
- Difficulties with speech, eating, and swallowing
- Nutritional deficiencies
- Diminished taste
- Burning mouth
- Tooth hypersensitivity
- Rampant tooth decay
- Gingivitis (inflammation and bleeding of the gums) and plaque accumulation
- Problems wearing dentures
- Localized and generalized mouth pain
- Jaw pain and difficulty opening the mouth
- Osteoradionecrosis of the jaw: injury to the jaw as a side effect of radiation therapy, often causing pain and swelling
- Mucositis: thinning of the oral mucosa, the tissue lining the mouth
- Mucosal bleeding of gums, cheeks, and tongue as a side effect of chemotherapy
- Apthous ulcers (canker sores), ulcers from infection, and other painful ulcerations
- Bacterial infections in gums, sinuses, salivary glands, tooth nerve (pulp)
- Viral infections: HSV1, CMV, VZV, EBV, respiratory
- Fungal infections, both localized and systemic

Dry Mouth
Types:

- Xerostomia: subjective feeling of having a dry mouth
- Salivary gland hypofunction (SGH): reduction in the quality and quantity of saliva

Caused by:

- Radiation therapy and chemotherapy
- Side effects of antipsychotic, antidepressant, antiparkinsonian, and antihypertensive medications, among others
- Medical conditions such as Sjögren’s syndrome and Alzheimer’s disease
- Terminal decline

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The Facts . . .

- Traditional oral hygiene care may not be appropriate for residents who are acutely sick, unconscious, non-responsive, or terminally ill.
- Palliative oral care focuses on strategies for maintaining residents’ quality of life and mouth comfort.
- Positioning during palliative oral care is important, as residents who lie flat most of the time are at higher risk for choking or developing lung infections such as aspiration pneumonia.
- In the final stages, palliative care residents may need to rinse their mouths with water several times an hour to keep their mouths moist and comfortable.

Rampant tooth decay & dry mouth in a bed-bound resident in late-stage Alzheimer’s disease after prolonged use of antipsychotic medications.
Treatment:

- Increase water intake if possible (use spray bottles, ice chips, or rinses).
- Stimulate salivary flow with sugar-free gum or candy.
- If possible, switch to a medication with fewer oral side effects.
- Use toothpastes without additives (such as sodium lauryl sulfate) that burn the mouth or use Biotene Prevident gel.
- Saliva substitutes are the preferred treatment.
- Saliva stimulants (e.g., pilocarpine) can have many side effects and require careful consideration before being prescribed.
- For severe dry mouth, apply Biotene or MI Paste inside the mouth.
- Keep Lanolin on the lips continually.

Saliva Substitutes

- A dry mouth can be very painful, with high risk of developing bacterial and viral infections.
- Saliva substitutes can make a resident’s mouth more comfortable.
- Unlike stimulants, saliva substitutes replace saliva rather than increase the amount of saliva that is produced.
- Saliva substitutes usually come in the form of a gel or spray and can be used as often as needed.
- In the final stages of illness, gently rub saliva substitute in the resident’s mouth every few hours.

- Rub a small amount of Lanolin or saliva substitute on the caregiver’s gloved fingertips when accessing a resident’s mouth.

Excessive Saliva

- Some residents with swallowing problems may at the same time have both a dry mouth and drooling from excessive saliva.
- Excessive saliva is a result of the muscles of the mouth and tongue not working properly, so that saliva pools in the mouth and flows out rather than being swallowed.
- These residents also may have salivary gland hypofunction (a reduction in saliva) and therefore can have rampant oral disease.
- Medications that reduce saliva production are available, but these have many side effects and require careful consideration before being prescribed.

Mouthrinses

- Residents needing palliative oral hygiene care are unlikely to be able to rinse and spit mouthrinse.
- Most palliative care residents have swallowing problems, so that any mouthrinse will run down the throat, increasing the risk of choking.
- Many mouthrinses contain alcohol, which will burn the resident’s cheeks, tongue, and other soft tissues, especially if the mouth is dry.
- If necessary, mouthrinse can be applied using a small spray bottle.
Mouth Swabs

- Most mouth swabs are safe to use in palliative oral hygiene care, as there is little risk of the resident biting on the swab and breaking it.
- Make sure that the swabstick is made of a strong material (not cardboard) and that the swab is firmly secured.
- Mouth swabs premoistened with sodium bicarbonate are available, as are suction mouth swabs, which work very well for residents with swallowing problems.
- Mouth swabs premoistened with lemon and glycerin may be drying to the mouth and are not recommended.
- Dry swabs, soaked in a warm water and salt mixture or alcohol-free mouthwash, may also be used.
- Several layers of gauze taped to a tongue depressor can be used to remove excessive debris and secretions from the tongue and soft tissues.

Swallowing Problems

- A resident who continually lies in a flat or reclined position is at higher risk for choking or aspirating germs and/or small objects.
- Many palliative care residents have weakened immune systems, so that any aspirated germs/objects can easily result in the development of pneumonia.
- The head of the bed should be raised or a resident’s head turned sideways when providing palliative oral hygiene care to minimize the risk of choking.

Burning Mouth and Taste Problems

- Both burning mouth and taste problems have been associated with depression.
- Treatment methods are the same as those used for a dry mouth, and triggering substances, foods, or drinks should be avoided.
- Topical analgesics are used carefully and only in consultation with a dental professional.
- Taste disorders are common with head and neck radiotherapy and can be treated with zinc, in consultation with a dental professional.
- Saliva substitute placed in the mouth before eating will counter the salty or metallic taste caused by a dry mouth.

Mucositis

Mucositis is inflammation and bleeding of the oral soft tissues of the lips, cheeks, gums, and tongue due to radiation or chemotherapy.

- Prevention of viral and bacterial infections is crucial, and treatment methods are the same as those used for dry mouth.
- Hydrogen peroxide products are not generally advised because they destroy oral mucosa.
- Removal of heavy nasal and oral secretions should be done regularly.
- Dentures may need to be removed.
- Diet may need to be changed to softer foods.
- Pineapple and some other juices contain enzymes that destroy oral mucosa, thus increasing the risk of infection and other problems.
- “Magic mouthrinses” containing topical analgesics are not generally advised and should be used only in consultation with a dental professional.
- Mouthrinses that can be helpful are:
  - Alkaline saline (1/2 teaspoon salt and 1/2 teaspoon baking soda in 8 oz of water).
  - Alcohol-free Chlorhexidine gluconate, prescribed by a dental professional, to improve plaque control.
Fungal Infections

Thrush (acute pseudomembranous oral candidiasis) covers the soft oral tissues and appears as a white or yellow growth that can be wiped off. It should be treated with topical and/or systemic antifungal medications as prescribed by a medical or dental professional. Because liquids are unlikely to remain in the mouth long enough to be effective, antifungal medications are often administered as gels or lozenges.

Denture stomatitis (candida), which usually appears as a red, inflamed area of the upper palate (and occasionally the lower dental ridge), is directly related to dentures. It can sometimes be painful and bleed, but is often not symptomatic.

The recommended treatment is to remove the dentures at night in order to rest the oral tissues, and scrub the dentures thoroughly in soap and water daily. If the infection is severe, it should be treated with topical and/or systemic antifungal medications as prescribed by a dental or medical professional.

Before applying antifungal topical gel to the inside fitting surface of the denture, the complete dentures should be sterilized in a solution of dilute sodium hypochlorite (bleach) or benzalkonium chloride (1:750 dilution).

Dentures should then be thoroughly scrubbed with soap and water. Do not use bleach with partial metal dentures, as it is corrosive to metal. Denture containers should either be sterilized or disposable and regularly replaced.

Angular cheilitis (candida) appears as irritated, red areas at the corners of the mouth. These areas can be infected by other bacteria as well as candida. A dentist should conduct an examination to determine the cause of the infection.

The recommended treatment is to clean the corners of the mouth daily with antibacterial soap and apply topical antifungal medications, as prescribed by a dental or medical professional, to the corners of the mouth.

Denture stomatitis (fungal infection on roof of mouth)

Angular cheilitis