

WELLSPAN HEALTH-YORK HOSPITAL

NURSING STANDARD OF CARE

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| DATES: | Effective: | June | 2005 |
|        | Reviewed:  | June | 2010 |
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 Approved by: Practice Council

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TITLE: STANDARDS OF CARE FOR ORAL CARE

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**PURPOSE:**

Bacteria causing lower respiratory tract infections colonize the mouth, oropharynx and dental plaque. Protecting the oral cavity from outside contaminants may reduce infections, and frequent and aggressive oral and dental care have been identified as preventive measures against acquiring ventilator-associated and healthcare acquired pneumonia.

**RATIONALE:**

1. An intubated patient has a 6-21 times greater likelihood of acquiring a nosocomial pneumonia and within 48 hours of intubation a patient can be colonized with the bacteria to cause pneumonia.
2. 90% of elderly patients ages 75-90 have moderate to severe gingivitis.
3. Mucositis, an inflammation that may or may not include ulcerations of the mucous membranes, affects an estimated 40%-100% of patients undergoing cancer treatment.
4. Poor oral hygiene can lead to poor nutritional status in already compromised patients by patients' reluctance to eat, vitamin deficiency, dehydration and weight loss.

**All Patients:**

1. Every patient admitted to the hospital will receive a soft toothbrush and fluoride toothpaste.
2. Assess patient's ability to perform oral care.
3. Encourage or assist every patient to brush their teeth at least twice a day.
4. Brush the teeth: inside, outside, back, and front and the tongue using a **soft bristle** toothbrush and **fluoride toothpaste** with water or saline. (peroxide or chlorhexidine can be used but provide no greater outcomes in oral care)
5. Any patient with dentures should be given a denture cup for soaking daily (usually overnight) in an effervescent solution (still brush tongue, gums and any remaining teeth).
6. Rinse the mouth with water or a bland rinse. Do not want a rinse with alcohol in it because it dries out the mouth and causes cracking.
7. Encourage patient to apply a moisture barrier to the lips frequently to prevent drying and cracking of the lips.

**Intubated Patients:**

**Policy**

The oral cavity of ventilated and/or unresponsive patients will be assessed every 4 hours as part of the oral care protocol. Assessment includes but is not limited to the following: bleeding, oral mucosal tears, ulcerations, abrasions or cracks, dry mouth, tissue color, redness and swelling. Oral care protocol is instituted for patients who are ventilated and/or unresponsive for >24 hours. Oral care is provided q 4 hours and prn. This protocol includes teeth brushing and suctioning of the oral cavity and along the endotracheal tube.

**Protocol**

Begin formal protocol the first morning in unit at 0600 according to the following schedule:

0800

- Perform hand hygiene and put on gloves
- Examine oral cavity
- Assess for audible cuff leak. If present, contact Respiratory Therapist to correct problem
- Drain condensate from vent circuit before moving or repositioning patient.
- Position patient with head to side or elevate head of bed. (Head of bed of all ventilated patients should be 30 degrees or greater unless medically contraindicated)
- Apply toothpaste to brush and brush teeth, gingiva, tongue and hard palate for 1-2 minutes using short, horizontal or circular strokes. Rinse with Cetylpyridinium chloride mouthwash. Use suction as needed.
- Suction oral cavity and along endotube to remove subglottic secretions with the thin, flexible suction catheter. (Yankauer suction catheters should **ONLY** be used for oral suctioning. On some patients, subglottic suctioning will be required more frequently than q 12 hour – if additional subglottic suctioning is required, use a thin, flexible, single use suction catheter for floor stock.)
- Oral suction as needed using the Yankauer suction catheter
- Apply mouth moisturizer inside mouth and lips

1200

- Perform hand hygiene and put on gloves
- Assess for audible cuff leak. If present, contact Respiratory Therapist to correct problem
- Clean mouth using mouth swab system with hydrogen peroxide mouthwash
- Oral suction as needed using the Yankauer suction catheter
- Apply mouth moisturizer

1600

- Perform hand hygiene and put on gloves
- Assess for audible cuff leak. If present, contact Respiratory Therapist to correct problem
- Clean mouth using mouth swab system with hydrogen peroxide mouthwash
- Oral suction as needed using the Yankauer suction catheter
- Apply mouth moisturizer

2000

- Perform hand hygiene and put on gloves
- Assess for audible cuff leak. If present, contact Respiratory Therapist to correct problem
- Drain condensate from vent circuit before moving or repositioning patient
- Position patient with head to side or elevate head of bed
- Apply toothpaste to brush and brush teeth, gingival, tongue and hard palate for 1-2 minutes using short, horizontal or circular strokes. . Rinse with Cetylpyridinium chloride mouthwash Use suction as needed
- Suction oral cavity and along endotube to remove subglottic secretions with the thin, flexible suction catheter. (Yankauer suction catheters should **ONLY** be used for oral suctioning. On some patients, subglottic suctioning will be required more frequently than q 12 hour – if additional subglottic suctioning is required, use a thin, flexible, single use suction catheter for floor stock).
- Apply mouth moisturizer inside mouth and lips]

2400

- Perform hand hygiene and put on gloves
- Assess for audible cuff leak. If present, contact Respiratory Therapist to correct problem
- Clean mouth with mouth swab system and hydrogen peroxide mouthwash
- Oral suction as needed using the Yankauer suction catheter
- Apply mouth moisturizer

0400

- Perform hand hygiene and put on gloves
- Assess for audible cuff leak. If present, contact Respiratory Therapist to correct problem
- Clean mouth with mouth swab system and hydrogen peroxide mouthwash
- Oral suction as needed using the Yankauer suction catheter
- Apply mouth moisturizer

At 0400 to 0600 when rooms are being stocked, a 24 hour supply of equipment for oral care protocol shall be placed in appropriate rooms. Yankauer catheter and holder are changed every 24 hours during stocking process.

**\*\*\*Note if patient has a tendency or potential to bite down on the oral swab then use toothbrush/toothpaste for oral care.**

Document oral care in task sheet on Millenium. Report any abnormal findings or reasons for inability to perform oral care in Nursing Progress Note.

**For patients that do not have a subglottic enotracheal tube suction the oral cavity q 2 hours.**

#### **Elderly or Incapacitated Patients:**

1. Assess patient's ability to manage their own secretions.
2. Assist or provide oral care at least twice a day. Oral care on these patients may require suctioning or saline squirts for mouth rinsing.
3. Brush the teeth: inside, outside, back, and front and the tongue using a **soft bristle** toothbrush and **fluoride toothpaste** with water or saline.
4. If patient has dentures remove them over night and allow for soaking of the dentures in an effervescent solution.
5. Still brush gums, tongue and remaining teeth with a soft bristle toothbrush and fluoride toothpaste.
6. Apply a moisture barrier to lips.
7. Oral care should take place at least twice a day.
8. For long term debilitated patient care: teach family the proper way to perform oral care for the family member in order to aide in the prevention of infections and subsequent hospital admissions.

#### **Oncology Patients:**

1. **Conduct oral assessment daily and prn and document findings – see Oncology area to use attached assessment scale.**
2. Assess patient's ability to perform their own oral care.
3. Encourage or assist patient to brush their teeth at least four times a day (after each meal and before bed).
4. Brush the teeth: inside, outside, back, and front and the tongue using a **soft bristle** toothbrush and **fluoride toothpaste** with water or saline. Replace toothbrush on a regular basis (at least every 6 months).

5. If patient has dentures remove them over night and allow for soaking of the dentures in an effervescent solution.
6. Encourage or assist patient to rinse mouth with salt water or baking soda and water four times a day.
7. Still brush gums, tongue and remaining teeth with a soft bristle toothbrush and fluoride toothpaste.
8. Apply a moisture barrier to lips.
9. If patient has a sore mouth, remove dentures. Replace only for meals. Still perform oral care.
10. Flossing **should not be performed** on patients who are neutropenic or thrombocytopenic. For other oncology patients floss once a day or as advised by clinician
11. Teach family and patient the importance of maintaining good oral hygiene in the prevention of infections and subsequent hospital admissions.
12. Educate patient on avoidance of tobacco, alcohol and irritating foods.

### **Scales for Assessment of Oral Mucositis: NCI and WHO**

#### **NCI Scale**

Grade 0 None

Grade 1 Painless ulcers, erythema, or mild soreness in the absence of ulcers

Grade 2 Painful erythema, edema, or ulcers but eating or swallowing possible

Grade 3 Painful erythema, edema, or ulcers requiring IV hydration

Grade 4 Severe ulceration or requiring parenteral or enteral nutritional support of prophylactic intubation

Grade 5 Death related to toxicity

#### **WHO Grading Scale**

Grade 0 None

Grade 1 Soreness +/- erythema, no ulceration

Grade 2 Erythema, ulcers. Patients can swallow solid diet

Grade 3 Ulcers, extensive erythema. Patients cannot swallow solid diet

Grade 4 Oral mucositis to the extent that alimentation is not possible

World Health Organization. Handbook for reporting results of cancer treatment. 1997, pp.15-22

### **Oral Care: FACT vs. FICTION**

- **Lemon glycerin swabs use or not to use, that is the question:**  
Not to use. Glycerin swabs were originally thought to moisturize the patient's lips, but, in actuality, it can cause harm. The citric acid in the lemon juice has no moisturizing qualities and can irritate the oral mucosa and decalcify the teeth. It actually depletes the saliva and accelerates the drying of the mucosa especially in compromised patients.
- **Soft vs. hard toothbrush:**  
The toothbrush should have ultrasoft bristles that clean but don't cause damage to inflamed tissue. Also the tapered bristles remove plaque at the gum line and massage the sensitive areas.
- **Mouthwash vs. water rinses:**  
Water or bland solutions are preferred. Commercially prepared mouthwash contains alcohol that can irritate oral tissue and cause drying over time. Many contain no antimicrobial effect at all unless specifically formulated with an antiseptic agent. A solution of diluted hydrogen peroxide solution is approved by the FDA and is known to work well at resisting bacterial colonization of the oropharynx. Ice chips have been consistently effective in benefiting patients with mucositis.
- **Moisturizers are they what they are cracked up to be?**  
Petroleum-based moisturizers are not recommended due to the possibility of aspiration if they are used inside the mouth. Also, the petroleum may cause lip inflammation if there are open wounds

present. If using a moisturizer it should be a water-soluble one. They work well for moisturizing the inside and outside of the mouth and lips because they can be absorbed by skin and tissue, providing the necessary hydration. Moisturizers with vitamin E can aid with healing of oral lesions. Saliva substitutes also help moisturize the oral cavity, aiding patients with dry mouth to eat and speak more easily.

### Who is at Risk?

- **Polypharmacy:**  
Many patients have numerous medications that can cause various oral problems. Drugs such as reserpine, chlorpromazine, atropine belladonna and antihistamines can cause a decrease in saliva. Dilantin has been known to cause gingival hyperplasia. Antibiotics can, while doing their job, cause depletion in the mouth's normal protective flora allowing for opportunistic pathogens to proliferate.
- **Disease Processes:**  
With certain diseases such as cancer, HIV, autoimmune diseases, diabetes and renal disease put the patient at a higher risk for oral problems.
- **Other risks:**  
Oxygen therapy, though necessary, increases the evaporation of moisture from the tongue and mucous membrane.
  - Tachypnea causes dry mouth because the saliva is humidifying the inspired air more quickly than it can be produced.
  - Mouth breathing may eliminate the normal fluctuating pressures necessary to stimulate blood circulation in gingival tissue.
  - Oral or nasogastric suctioning
  - N.P.O. status

### Challenging Patients

Patients can often be challenging to perform oral care with. Some patients might refuse to open their mouth or bite the toothbrush. Some patients (especially the intubated ones) are unable to rinse. Still others may even be physically or verbally aggressive in response to oral care. However, **oral care is still an essential part of their treatment.**

### Tricks of the Trade:

- develop a routine with oral hygiene care at the same time every day when possible
- perform oral care in a quiet distraction free environment
- use short simple directions
- breakdown the tasks to one step at a time
- use non-verbal cues such as facial expressions, reassuring body contact
- use gentle touch to promote trust
- use reminders and prompts to encourage oral care
- provide diversions to occupy hands and prevent grabbing at staff
- may need multiple caregivers for assistance
- **DON'T GIVE UP!!!!!!**

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