



Mouth Care...Treating the Often Overlooked Symptoms

Careful attention to the hygiene of the mouth, lips and nares can do much to add to the health and comfort of seriously ill patients.

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It is easy to overlook the care of the mouth in seriously ill patients. This is regrettable because problems in this area can be painful, distasteful and may impair health and nutrition due to infection and reduced oral intake of food and fluids. In addition to inquiring about such symptoms as pain, nausea, bowel function, sleep, mood, orientation and breathlessness, the physician should carry out an assessment of the mouth, lips and nares as a part of the overall care of the patient. Careful attention to the mouth will enhance comfort and well-being, and improve nutritional intake. This helps patients through treatment programs, like chemotherapy, and helps

relieve the anxiety suffered by patient and family when the patient cannot eat.¹ Good mouth care is a component of attentive nursing and medical care and can be used as an indicator of the overall quality of care being delivered.

The steps to care include assessing the mouth, lips and nares by functional inquiry and physical examination, making a diagnosis of the problems, developing treatment approaches and reassessing their effectiveness.



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Case Scenarios

Mrs. A, 42, has been admitted for surgery for spinal cord compression secondary to breast cancer. She was on dexamethasone 4 mg orally four times daily for about six weeks prior to surgery due to escalating pain problems. Her surgery over, she is now on a slowly tapering dose. In recent days, her appetite has gone down somewhat and she feels her voice is “thicker” and hoarser now. You also notice her voice is hoarse and seek to solve her problem.



Mr. N, 53, is receiving chemotherapy on a monthly basis for bowel cancer. Approximately four days after the second five-day cycle is completed, he develops



a severe mucositis, with painful raw and open oral mucosa, and cracked bleeding painful lips. His nutrition is quite impaired during this time and he requires intravenous fluids. He isn't sure he can continue with the treatments, although they are helping the cancer. What can be done?

Mr. R, 45, is dying of a brain tumour. He and his family have requested no prolongation of life with intravenous fluids or other means. He is unresponsive now and appears comfortable in every way, except that his lips, mouth and nose are quite dry. His family is worried this is due to lack of fluids and may be uncomfortable for him. It is hard for them to see him like this. They ask: “Should we start an intravenous, doctor?”



From Practice

Mrs. K, 69, has been admitted with urosepsis. She developed some confusion due to the sepsis and was prescribed haloperidol by your colleague. The confusion has resolved with treatment of the infection and now she is sedated with the haloperidol. She is also somewhat dehydrated, having received some furosemide and having a reduced oral intake.



Mr. J is an 83-year-old man admitted with pneumonia. He has a history of chronic obstructive pulmonary disease (COPD) and has been on steroids for several exacerbations of this problem. He is currently on antibiotics and steroids. His nutrition isn't very good. He lives alone and often doesn't feel like cooking or even eating. He is quite thin at the time of admission. While his pneumonia is improving, his oral intake is poor. The nurse tells you that his tongue "looks like black fur."

Principles of Treatment

Treatment of problems in the mouth depends on a diagnosis of the condition being treated. This is followed by an organized approach to care, regular and frequent interventions and treatments, as well as an assessment of progress. "As needed" (prn) mouth care is as ineffective as PRN pain relief. It doesn't work for three reasons: the patient must have the symptom in order to ask for the treatment; patients are often too ill to ask; and the orders for a care and treatment plan are likely to be overlooked in a busy health-care system.

Problems in the mouth may be related to broader health-care problems, such as depression, general nutrition, hydration, ill-fitting dentures, decayed or missing teeth. Attention to total patient care is the foundation of good mouth care and conversely, problems in the mouth can be an indicator of underlying health and social problems.

Helping Our Patients

Figure 1 outlines approaches to treating common problems in the mouth.²⁻⁴ These approaches can be used in treating the patients mentioned in this article.

Mrs. A

Mrs. A has been on steroids for several weeks. She is at risk of developing oral candidiasis. A standard nursing and medical care protocol for her should include a daily examination of her mouth to identify and treat this problem early. Her complaint of reduced appetite and hoarse voice are sometimes symptoms of oral candidiasis. When asked, she also reports soreness in her upper throat when she swallows. The “cheesy” white plaques of oral candidiasis are readily seen throughout her mouth. Your orders for her include regular mouth cleansing four times daily with benzydamine hydrochloride mouthwash diluted to half strength with water to rinse and spit. This should be followed by nystatin oral solution 500,000 units (5 cc of 100,000 units per cc solution) to swish and swallow four times daily for 14 days. You also write orders to encourage oral fluids.

There are several cleansing mouthwashes. (Figure 1). It is important to avoid over-the-counter preparations because many contain alcohol, which is drying and can cause pain in a fragile mucosa. Half-strength hydrogen peroxide solution is a good cleansing mouthwash if there is debris and crusting inside the mouth.

Mrs. A’s mouth feels better within 36 hours and over the next 10 days the candidiasis goes away. You continue to taper her steroids gradually and leave orders to watch her mouth for recurrence and to re-start mycostatin if this occurs. You suggest she include some yogurt in her diet on a daily basis to help maintain oral flora.

Mr. J

Mr. J’s mouth presents a somewhat broader therapeutic challenge because it involves his total health and social situation. He is poorly nourished and doesn’t feel like eating. He experiences social isolation and feelings of loneliness. As you talk with him, it becomes evident he is clinically depressed. He feels hopeless and “can’t see the point of it all.”

You examine his mouth and find some ill-fitting dentures with one or two teeth missing. His tongue has a black, furry surface which you identify as one of the three pre-

Palliative Mouth Care Measures

Dry Mouth:

Treating the patient who is alert and capable of oral intake:

- Suggest the patient suck sour fruit candies, ice chips, popsicles or raw pineapple. Try to increase oral fluids. Use mouthwashes and oral lubricants regularly (see below).

Treating the patient who is not capable of oral intake:

- Cleanse the mouth every two hours with benzydamine HCL half strength, or with Orarinse[®], Biotene[®] or a similar mouthwash product. Follow with lubricant, such as Artificial Saliva[®], K-Y jelly[®], Moi-Stir[®] spray or pre-moistened swab sticks.

Treating both groups of patients with very dry lips, oral and nasal mucosa:

- Administer nebulized saline 3 cc by ventimask over mouth and nose every four to six hours.
- Use a humidifier in the room; if oxygen is in use, add humidification.
- Apply petroleum jelly to the lips every two hours.

Oral crusting and debris in the mouth:

- Use half-strength hydrogen peroxide rinses every four to six hours until clean and then institute mouth-care orders as above.

Oral candidiasis:

- Prescribe regular cleansing with a mouthwash (see above), followed by nystatin oral solution 500,000 units to swish and swallow four times daily for 10 to 14 days. If the condition is severe or does not resolve, systemic oral or intravenous antifungal agents may be required.

Ulceration and stomatitis:

- Use normal saline or baking soda (one tsp of either in 8 oz of water) rinses to cleanse every one to two hours; "magic mouthwash" (Figure 2) to rinse and spit every two to three hours; apply petroleum jelly to the lips every two hours; "pink lady" mouthwash (Figure 2) as required for pain relief; if the condition is severe or infected or if the patient is ill, oral or intravenous antibiotics may be required.

For pain relief: oral codeine syrup, 15 mg to 30 mg every four hours, may be used as needed. Oral morphine syrup may also be used (oral morphine 5 mg equals 60 mg of oral codeine). If the subcutaneous route is required, the dose is one half of the oral dose for both opioids.

Figure 1

Palliative Care

sentations of oral candidiasis. His mouth and lips are dry with red cracks at the lip corners. You recall that oral candidiasis has three presentations: the familiar “cheesy” white plaques (like Mrs. A demonstrates), the black, furry hyphae (as seen with Mr. J), and a cherry red oral mucosa and lips. You order the mouth care, similar to Mrs. A, to cleanse his mouth and treat the oral candidiasis. In addition, you order nystatin ointment for his lips and corners of his mouth. Treating Mr. J’s mouth will be straightforward, but there are broader issues.

Treating Mr. J’s Broader Issues

You spend some time talking with him about his sadness and his feelings of loneliness. You start a low dose of selective serotonin reuptake inhibitor (SSRI) antidepressant. You ask the social worker to provide some social support while he is in the hospital and begin to plan for support services at home, including homemaking, volunteer visiting and some nursing supervision. You consider his nutritional situation, asking the nutritionist to see him to discuss foods and fluids of preference, to enhance his caloric and protein intake and to obtain an accurate assessment of how much he will eat. You order a vitamin and mineral supplement (one tablet daily) and a glass of sherry before lunch and dinner — something which Mr. J feels he might enjoy. You plan to monitor the situation carefully over the next few days, wondering whether Mr. J may require enteral feeding, but hoping to avoid this, if possible.

With some extra attention and company and a more comfortable mouth, Mr. J begins to eat and drink more. He sleeps better with the antidepressant and generally feels more hopeful about life. His pneumonia resolves. Careful home-care planning occurs before he leaves the hospital and you plan to see him at home in one week. You arrange for a dentist colleague to see Mr. J, to address the ill-fitting denture problem.



Sample recipes for therapeutic mouthwashes for mucositis or stomatitis

"MAGIC MOUTHWASH" (Therapeutic and pain relief)

Diphenhydramine 12.5 mg/5 ml elixir	120 ml
Nystatin 100,000 units/1ml suspension	40 ml
Distilled water	39 ml
TOTAL	199 ml

Directions:

5 ml to 10 ml to swish and spit every two to three hours.

"PINK LADY" (Pain relief)

Equal Parts of:

Viscous xylocaine 2% and magnesium hydroxide/aluminum hydroxide.

Directions:

Swish and sip 5 ml to 10 ml every four hours as needed for pain relief. Advise patient this may numb the swallowing sensation for about one hour after use and to refrain from eating or drinking during that time. Some patients find the numbing sensation unpleasant and are unable to use this solution.

Figure 2

Mrs. K

Mrs. K's mouth, nose and lips are all quite dry and she is really too drowsy to be interested in her meal trays or to talk with you very much. In fact, when you look in her mouth there are pieces of crushed tablets caught in the dry mucosa of her tongue. Her tongue is crusted.

You stop her regular haloperidol and leave a small prn order if she requires this. You reassess her oral medications and put these on hold until she is more alert. You increase her intravenous fluid orders until she is sufficiently awake to take oral fluids. You ask the nurses to give mouth care every two hours: cleanse her mouth with half strength hydrogen peroxide and follow with a mouth lubricant, such as Artificial Saliva®, Moi-Stir® or Oral Balance®, and apply petroleum jelly to her lips. The frequency of these treatments can be reduced when she is awake and alert and has improved her oral intake. You avoid glycerine swabs, as they are drying to the mucosa and, rather than helping, they worsen the problem.

Mr. R

Mr. R presents another situation of dry mouth and mucous membranes. He is not able to wake for oral fluids, so we need to seek other means to hydrate his mouth, lips and nares. The following approach is taken: water soluble lubricant jelly placed just inside the nares, and water soluble lubricant, such as Moi-Stir® or Oral Balance® solution, is applied to the oral cavity and tongue regularly; petroleum jelly is applied to the lips every two hours and nebulized sterile saline 3 cc is given *via* a ventimask over the nose and mouth four to six times daily for a misting of moisture. Within a matter of hours, Mr. R looks less dry and his family is more assured of his comfort. The frequency of the normal saline mists can be reduced as long as his mouth, lips and nares remain moist.

Intravenous fluids, if not desired or indicated for other reasons, are not required to treat dry mouth and mucous membranes.¹ In fact, without good mouth care, the oral mucosa may remain dry and uncomfortable even with intravenous therapy. There is no substitute for frequent and attentive mouth care. Some family members, with teaching, can be involved in providing mouth care for their loved one at home or in hospital. This helps them to feel they are doing something to provide care and comfort, thereby reducing feelings of helplessness.

Mr. N

Mr. N has mucositis/stomatitis, a problem that can be a great source of suffering in some chemotherapy patients. Goals of therapy include pain relief, prevention and treatment of infection from candida and bacteria, and promotion of healing. Sucking on ice chips while chemotherapy is being infused may prevent or reduce the severity of the mucositis. Modifications of the chemotherapy dose may need to be made if the mucositis is severe.

You order “magic mouthwash” for treatment and “pink lady” mouthwash for pain relief (Figure 2), with petroleum jelly for the lips and oral codeine syrup 15 mg to 30 mg every three to four hours as needed for pain relief. Within a few days, the mucositis begins to resolve. You speak with the oncologist who plans for a slight reduction in the next dose of chemotherapy. With attention to symptom control, Mr. N feels he will be able to finish his last two treatment courses.

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