Oral Care in the Intensive Care Unit

By Norman Trieger, MD, DMD. From the Department of Dentistry, Oral and Maxillofacial Surgery, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY.

One of my favorite aphorisms is, “The mouth really is part of the body.” The mouth gets limited exposure in medical education and has been delegated to dentistry, where emphasis is directed to 2 major clinical infections: caries and periodontitis.

The article by Munro and Grap1 in this issue of the American Journal of Critical Care masterfully identifies important complications to which immunocompromised patients are exposed. Pathogenic microflora of the mouth and pharynx play a major role in several systemic diseases: bacteremias, endocarditis, pneumonia, chronic lung diseases, and endotoxin-related atherosclerosis, to name but a few.2-4

A patient in the intensive care unit may be intubated, have a nasogastric tube in place, be heavily sedated, or be febrile—all of which lead to dehydration and breathing through the mouth. These, in turn, cause a change in flora and bacterial overgrowth, with the loss of salivary effectiveness. The administration of antihypertensive and anticholinergic medications also impairs salivary functions and promotes xerostomia.

Oral hygiene performed by a nurse or aide is difficult, especially in patients who are semiconscious and noncooperating. To some caregivers, entering a patient’s mouth is considered an invasion of privacy and even may have psychosexual undertones. Nevertheless, a soft, pediatric bristle brush properly used can be effective in removing microorganisms and debris. Partial removable dentures are best taken out and thoroughly cleaned to facilitate mouth care.

The administration of ice chips is one way to reduce mouth dryness, make patients more comfortable, and keep down bacterial overgrowth. Use of oral chlorhexidine (0.12% solution) as an antimicrobial mouth rinse is encouraged, but the agent should be administered as a spray every 12 hours to reduce total volume. Use of low-intensity suctioning is also helpful and protective against aspiration during mouth care.

Older patients, especially those who are in a supine position and sedated, tend to become mouth breathers and snorers. Their oxygen saturation decreases when the jaw and tongue fall backward and compromise the airway. Humidified nasal oxygen is indicated.

The presence of a nasogastric tube interferes with cough and swallowing mechanisms and often leads to aspiration and ventilator-associated pneumonia. Although it may seem obvious, the presence of loose teeth, large deposits of calculus (tartar), and infected gingivae with easy bleeding require consultation with a dentist.

A better designed procedural approach for oral care for patients in the intensive care unit is needed.5

REFERENCES