THE INCREASING USE OF ALCOHOL-BASED HAND SANITIZERS

We all know that frequent hand washing is important to prevent the spread of infectious agents to and from those with whom we have both direct and indirect contact. However, it is not always convenient to wash. Having traveled this past winter to anesthesia board meetings in Australia, Charleston, and Scottsdale, I found that eating on a plane during turbulent weather when seat belts should not be removed prevented me from always washing up first. These incidences were perfect for using alcohol-based hand sanitizers. One merely places a small amount on the hands and then rubs them together until dry. No water, soap, or paper towels are necessary. One can even remove a small amount of the sanitizer from a larger commercial container and place it into almost any clean, more convenient-sized labeled bottle to improve its portability and utility. The Centers for Disease Control and Prevention's *Guidelines for Infection Control in the Dental Health-Care Setting—2003* recommends storing liquid hand-care products in either disposable containers or containers that can be washed with soap and water before refilling. Such containers must not be refilled or "topped off" when partially empty, as that could lead to bacterial contamination of resistant organisms.

Hand sanitizers can be found throughout the hospital, and there are already regulations on how wide the corridors must be before a particular-sized dispensing unit can be attached to the wall. Even my own state dental board has approved this type of product for use in the dental office before placing gloves and after removing them and anytime an object or surface that might be contaminated with blood or saliva is touched with bare hands.

Of course, as a "shade-tree mechanic" working on antique cars and tractors in his spare time, your editor knows that hand sanitizers cannot replace vigorous scrubbing with soap and water to remove obvious dirt, grease, and grime. Nevertheless, rubbing your hands

with one of these products is safe and effective in reducing the bacterial skin count for many dental office situations. Furthermore, frequent hand washing with soap and antiseptics can cause chronic contact dermatitis. Damage to the skin can change the skin flora, resulting in more frequent colonization by staphylococci and gram-negative bacteria. Because alcohol-based sanitizers may be less irritating to the skin, their use may actually improve hand hygiene.

For oral surgical procedures, the Centers for Disease Control and Prevention recommends surgical hand antisepsis before donning sterile gloves. One should follow the manufacturer's recommendations by using either antimicrobial soap and water or plain soap and water followed by drying the hands and applying an alcohol-based surgical hand-scrub product with persistent activity to prevent the massive bacterial growth that otherwise could develop under the warm, moist gloves.

Your editor typed this treatise on his laptop computer in the hospital late at night while munching on a few cookies to stay awake after finishing a long day with a fiberoptic endotracheal intubation of a severely infected dental patient who had not bathed for a long time. Recalling a study conducted at Northwestern Memorial Hospital that demonstrated that vancomycin-resistant *Enterococcus faecium* and methicillin-resistant *Staphylococcus aureus* could survive on the keyboard for 24 hours and that *Pseudomonas aeruginosa* could survive for 1 hour, your editor considered sanitizing the keys on his laptop computer before eating, but that disinfection plan was rejected because of possible damage to the computer. Thus, this editorial was created by the repetitive process of typing a few words, rubbing the hands with a sanitizer, and taking a few bites.

We should not be concerned about being labeled as having an obsessive-compulsive disorder or being a "germ-a-phobe" like Howard Hughes. Hand sanitizers are good and should be used frequently.

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