Alcohol-Based Hand Rubs: Clinical Experiences (8/06)


This article describes the experiences of a dental school while they were investigating the usefulness of implementing a waterless, alcohol-based product into their daily practice. The school studied the efficacy of a 65% ethanol-based antiseptic that was applied via a spray from an electric eye-driven, no-touch dispenser. The response from the clinical faculty was overwhelmingly favorable. Faculty members found they could move more rapidly between patient evaluations and students. A number of comments also were made concerning the relative ease of donning powder-free gloves compared with the effort required after washing hands with an antimicrobial product and water. Examination of the clinician’s hands over time during routine use of the waterless hand hygiene agent did not find excessive drying of skin or exacerbation of dry skin problems. Implementation of a hand-hygiene protocol using a waterless, alcohol-based agent in this dental school clinic was very successful as an adjunct procedure to the classic “gold standard”—basic handwashing with an antimicrobial agent.

DECS Comment: Adherence of health-care personnel to recommended hand-hygiene procedures has been poor with an overall average rate of only 40% in hospital settings. Because of this, the Centers for Disease Control and Prevention (CDC) recommend the use of alcohol-based hand products primarily to increase compliance in hospital settings. Alcohol-based hand rubs are antiseptic agents not requiring the use of water. In the United States, preparations usually contain 60%–95% ethanol or isopropanol. Because alcohol-based hand rubs are not appropriate for use when hands are visibly dirty or contaminated with proteinaceous materials, they will not replace the need for sinks or other hand-hygiene supplies such as soap and paper towels.

Although alcohol-based hand rubs have the potential to increase hand-hygiene compliance, sinks and hand-hygiene supplies (e.g., soap, paper towels) are readily available in dental operatories unlike in many other health-care settings. Therefore alcohol-based hand rubs may not be indicated in every operatory. Alcohol-based hand rubs may be most useful in exam rooms or radiology work areas where multiple patients are seen in a short period of time and frequent handwashing is indicated, or in clinics with dental residency programs where staff members are performing frequent patient checks. Also, alcohol-based hand rubs may be useful during deployments. If you think the use of alcohol-based hand rubs will increase compliance with hand hygiene or might help decrease dermatitis symptoms, then the addition of these products to the dental clinic may be indicated. As always, whenever considering the introduction of a new product into your practice, careful evaluation is indicated.