Balancing efficacy and safety in the use of oral sedation in dental outpatients

Raymond A. Dionne, DDS, PhD, John A. Yagiela, DDS, PhD, Charles J. Coté, MD, Mark Donaldson, PharmD, Michael Edwards, DMD, David J. Greenblatt, MD, Daniel Haas, DDS, PhD, Shobha Malviya, MD, Peter Milgrom, DDS, Paul A. Moore, DMD, PhD, MPH, Guy Shampaine, DDS, Michael Silverman, DMD, Roger L. Williams, MD and Stephen Wilson, DMD, MA, PhD

Background. Concerns about the safety of pediatric oral sedation and the incremental use of triazolam in adults prompted a workshop cosponsored by several professional organizations.

Overview. There is a strong need and demand for adult and pediatric sedation services. Using oral medication to achieve anxiolysis in adults appears to have a wide margin of safety. Mortality and serious morbidity, however, have been reported with oral conscious sedation, especially in young children. Most serious adverse events are related to potentially avoidable respiratory complications.

Conclusions. Clinical trials are needed to evaluate oral sedative drugs and combinations, as well as to develop discharge criteria with objective quantifiable measures of home readiness. Courses devoted to airway management should be developed for dentists who provide conscious sedation services. State regulation of enteral administration of sedatives to achieve conscious sedation is needed to ensure safety.

Practice Implications. Safety in outpatient sedation is of paramount concern, with enteral administration of benzodiazepines appearing safe but poorly documented in the office setting. Conscious sedation by the enteral route, including incremental triazolam, necessitates careful patient evaluation, monitoring, documentation, facilities, equipment and personnel as described in American Dental Association and American Academy of Pediatric Dentistry guidelines.

Key Words: Triazolam; conscious sedation; anxiety; dental pain control