

MEDLINE Abstract

Evidence of safety for individualized dosing of enteral sedation.

Gen Dent. 2007; 55(5):410-5 (ISSN: 0363-6771)

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Fear of dentistry is a pervasive and persistent phenomenon that contributes to avoidance of dental care and results in a substantial public health problem. While the use of incremental enteral sedation has increased, there is a paucity of published evidence to evaluate its safety. This study sought to assess the safety of individualized dosing of enteral sedation for adults in the dental outpatient setting. The authors sent a mail survey to members of the Dental Organization for Conscious Sedation (DOCS) concerning their practice and practitioner characteristics. Anonymous treatment forms with monitoring records were collected from respondents and analyzed for pre-specified adverse event criteria. The majority of respondents reported practicing incremental enteral sedation for two to five years, accounting for less than 10% of their practice. Incremental enteral sedation, either alone or in combination with nitrous oxide and oxygen, was used most frequently. Monitoring with both pulse oximetry and automated blood pressure (BP) were prevalent. Triazolam was the drug used most commonly for enteral sedation. Of the 7740 cases submitted, 1686 (21.8%) met event criteria; the most frequent event was a decrease of more than 25% in diastolic BP from pre-drug baseline. Neither provider training nor the percentage of practices engaged in incremental enteral sedation were associated with any event; however, practicing incremental enteral sedation for less than 12 months was a significant predictor of any event ($p = 0.001$). Risk of having an event was not related to practice factors (that is, the time spent practicing incremental enteral sedation, the percentage of the practice devoted to practicing incremental enteral sedation, the number of cases performed, or the type of monitoring) or training factors. This survey represents the largest number of subjects reported in the literature concerning enteral sedation. These observations provide evidence for the safety of enteral sedation when these drugs and combinations are administered by properly-trained dentists who monitor patients with pulse oximetry, BP measurement, and direct observation.

PreMedline Identifier:17899717

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