Comparison between intranasal and intravenous midazolam sedation (with or without patient control) in a dental phobia clinic.


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Two new modes of sedation; patient-controlled sedation (PCS) and intranasal sedation (INS) were compared with the traditional bolus intravenous sedation (BIVS) while delivering dental care to apprehensive patients in a specialized dental fear clinic. Effective sedation was evaluated in a randomized, prospective study in 42 ASA 1 and 2 patients, in a factorial design. Eighteen patients were sedated with .5% midazolam INS. Ten patients received intravenous PCS via a patient-controlled analgesia pump containing midazolam, and 14 patients received intermittent intravenous boluses of 1 mg midazolam given as needed (BIVS). Appropriate local anesthetic nerve blocks with 2% lidocaine with 1:100,000 epinephrine, and supplementary inhalation of nitrous oxide and oxygen via a nasal mask, were also given to all patients in the study. The dosage requirement with PCS was higher than that found with INS or BIVS. However, PCS produced some anxiety reduction when compared with INS and BIVS. It also reduced interfering movements during treatment more effectively than the other sedation modes. No complications were detected in any of the patients and they were able to leave the clinic within 1 hour after completion of treatment.

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