
Comparison of Midazolam vs. Midazolam and Hydroxyzine for Conscious Sedation. Timothy Wilson, DDS*, Jian-fu Zhu, DDS, MSD, DSc, Department of Pediatric Dentistry, Children's Hospital of Michigan.

Objective; The evaluation of comparison of Midazolam (M) vs. Midazolam and Hydroxyzine (M-H) for conscious sedation of pediatric dental patients.

Experimental Methods Used: This study examines the sedative effect of Midazolam 1.0 mg/kg compared to Midazolam at 0.5 mg/kg in combination with Hydroxyzine at 2.0 mg/kg. All of the children, aged 2 to 6 years old, were in good health, ASA 1. Thirty patients who need restorative dental treatment were given either regimen in a randomized, double-blind manner. The preoperative behavior, the degree of body movement, crying, pulse rate, and blood oxygen saturation were monitored before, during, and after the procedures.

Results: Both regimens seem to give adequate sedation to all the children once they were brought into the operatory. The combination of M-H produced one failed sedation; the procedure had to be aborted. The children who received both regimens all had minimal or no crying with injection and little or no crying throughout the procedure. We noticed the combination of M-H gave us longer working time during extended procedures. The angry response usually displayed with Midazolam alone was not present with the combination of M-H during recovery. The only adverse effect with both regimens was hiccups.

Conclusion: Both M and M-H are both effective and safe ways to sedate pediatric patients. The combination of M-H seems to give a longer working time and produces a less aggressive or agitated child after the procedure is over. The combination of M-H seems to be a slightly more desirable alternative than Midazolam alone.