

Blumer S, Costa L, Peretz B. Success of Dental Treatments under Behavior Management, Sedation and General Anesthesia. Accepted. J Clin Pediatr Dent, 2016.

Abstract:

Objective: To present comparative data with the aim of assisting the practitioner to choose between behavior modification (BM) techniques, pharmacologic sedation (N₂O-O₂ alone or combined with midazolam 0.5 mg/kg) or routine general anesthesia (GA) for the most successful approach in enabling pediatric dental care. **Study design:** Dental records of 56 children treated in a university dental clinic between 2006-2016 were reviewed, and data on age, gender, required treatment (amalgam restorations, composite restorations, pulpotomy, and stainless steel crowns [SSC]), treatment approaches and therapeutic success at final follow-up were retrieved.

Results: Treatment under GA had the best success rates compared to both BM and pharmacologic sedation. N₂O-O₂ alone had a 6.1-fold greater risk of failure compared to N₂O-O₂+midazolam (p- <0.008). Amalgam restorations had a 2.61-fold greater risk of failure than SSC (p- <0.008). **Conclusions:** The GA mode yielded significantly greater success than the N₂O-O₂ mode alone. There were no significant differences in success rates between GA and combined midazolam 0.5 mg/kg+N₂O-O₂. When choosing restoration material, it is important to remember the high success rate of SSC compared to amalgam restoration.