

Reasons for Failed General Anesthesia Pediatric Dental Procedures

Anna Price, DDS

Research Mentor and other collaborators:

Kecia Leary, DDS, MS; Fang Qian, PhD, MA, MPhil

Background:

Failure to attend a general anesthesia (GA) appointment can be costly, inconvenient, and hazardous to the health of the patient. The purpose of this study is to evaluate reasons pediatric dental patients failed GA appointments. This was a follow-up study to a similar study completed in 2021, aiming to build upon and further investigate the insights obtained from the earlier research.

Methods:

Using methods from the previous study, data were collected using a retrospective review of 276 charts of patients with GA appointments at a university pediatric dental clinic between September 26th, 2022, and May 31st, 2023. Information obtained included age, sex, distance between residence and the university, insurance type, referral status, affiliation of primary care provider, special health care needs (SHCN) status, completion of intermediate dental treatment, time between consultation and GA appointment, and reasons for failed appointments. Descriptive and bivariate analyses ($\alpha = 0.05$) were conducted.

Results:

276 patients were included in the study. There were 45 failed and 231 kept appointments. Subjects who received emergency dental care between consultation and the GA appointment were more likely to fail than those who did not (26.5% vs. 14.1%; $p=0.033$). Subjects with SHCN were less likely to fail than those without (11.8% vs. 20.7%; $p=0.044$). The mean/median days between consultation and the GA appointment for subjects who failed were significantly higher than for those who kept their appointment (219.5/215.5 vs. 166.8/181; $p=0.002$). Factors of age, sex, distance between residence and the university, insurance type and clinical variables showed no significant associations with failed appointments.

Conclusions:

Significant differences were found between patients who failed their appointments compared with patients who kept their appointments if they received emergency dental care and were a patient with SHCN.

References:

Yildirim S, Bakkal M, Bulut H, Selek S. Quantitative evaluation of dental anxiety indicators in the serum and saliva samples of children treated under general anesthesia. Clin Oral Investig 2018;22(6):2373-80. 2

American Academy of Pediatric Dentistry. Use of anesthesia providers in the administration of office based deep sedation/general anesthesia to the Pediatric Dental Patient. The Reference

Manual of Pediatric Dentistry. Chicago Ill.: American Academy of Pediatric Dentistry; 2021:372-6.

O'Brien K, Mattick R, Mandall N, Wright J, Conboy F, Gosden T. Orthodontics: Are specialist outreach clinics for orthodontic consultation effective? Randomized controlled trial. *Br Dent J* 2001; 191(4):203-7.

Souza JGS, Souza SE, Noronha MDS, Ferreira EFE, Martins AMEBL. Impact of untreated dental caries on the daily activities of children. *J Public Health Dent* 2018;78(3):197-202.

Butler, J., Leary, K., Qian, F., & Lesch, A. (2021). Comparison of Failed and Kept General Anesthesia Appointments in a Pediatric Dental Clinic. *Journal of Dentistry for Children (Chicago, Ill.)*, 88(3), 173–179.

Palumbo P, Massimi F, Biondi A, Cirocchi R, De Luca GM, Giraud G, Intini SG, Monzani R, Sozio G, Usai S; Società Italiana di Chirurgia Ambulatoriale Day Surgery (SICADS) Board. Recommendations for outpatient activity in COVID-19 pandemic. *Open Med (Wars)*. 2021 Nov 9;16(1):1696-1704