Altogether, 395 patients with 561 procedural sedation cases were included. The median age was 55 months (range: 15 to 119 months), and 58.5% (231/395) were male. The rate of successful procedures under PSA was 99.3%. Serious Adverse Events (SAE) occurred in 2.7%. Patients who received more than three sedative medications had higher SAE than patients who received fewer medications (adjusted for age, location of sedation, type of procedure, and ASA classification) (odds ratio: 8.043; 95% CI: 2.472 – 26.173, P = 0.001). location. This is in contrast to a previous study, which reported a higher incidence of AE in pediatric dental offices (16). Patients with ASA class I and II are considered good candidates for PSA (4, 5, 7). Grunwell et al. (16) reported 72% of the population were ASA class I–II, and showed increasing adverse events among the patients with ASA class III–IV. Furthermore, for patients who had ASA class III–IV, Mallampati class III, or conditions increasing the risk of airway compromise, an anesthesiologist must be present (21). There was a prior study of performing PSA by nonanesthesiologists in adult patients who underwent gastroendoscopy (22). The study showed no increase in adverse events in patients who had ASA class III. Another study showed no SAE in 29 out of 84 children who had ASA class III–IV and underwent computed tomography under anesthesiologists' supervision (23). This study showed that PSA could be safely performed without an anesthesiologist on patients with ASA classification of more than 3. In addition, 90% of the patients in this study had ASA class III–IV. It could be expressed that adverse events could not stratify the risk by ASA classification.location. This is in contrast to a previous study, which reported a higher incidence of AE in pediatric dental offices (16). Patients with ASA class I and II are considered good candidates for PSA (4, 5, 7). Grunwell et al. (16) reported 72% of the population were ASA class I–II, and showed increasing adverse events among the patients with ASA class III–IV. Furthermore, for patients who had ASA class III–IV, Mallampati class III, or conditions increasing the risk of airway compromise, an anesthesiologist must be present (21). There was a prior study of performing PSA by nonanesthesiologists in adult patients who underwent gastroendoscopy (22). The study showed no increase in adverse events in patients who had ASA class III. Another study showed no SAE in 29 out of 84 children who had ASA class III–IV and underwent computed tomography under anesthesiologists' supervision (23). This study showed that PSA could be safely performed without an anesthesiologist on patients with ASA classification of more than 3. In addition, 90% of the patients in this study had ASA class III–IV. It could .be expressed that adverse events could not stratify the risk by ASA classification