

Positions Matter: The Power of Pediatric Post-Operative Positioning

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Introduction: Positioning of pediatric patients immediately following oropharyngeal surgery impacts outcomes, including the development of airway obstructions.

Identification of the Problem: Anecdotal observation that younger patients (less than 6 years) who had an Adenoidectomy and/or Tonsillectomy and arrived into PACU on their sides didn't seem to choke as much.

Purpose of the Study: We evaluated the relationship between post-operative positioning of patients immediately following adenoidectomy and/or tonsillectomy and complications of airway obstruction to guide management and optimize care in the PACU.

Methodology: A prospective observational study was performed; data was collected on postoperative positioning and relevant airway-related issue outcomes for pediatric patients undergoing adenoidectomy and/or tonsillectomy.

Results: Among all study patients (n = 496) admitted to the PACU, 223 (45%) experienced airway-related complications. Within the supine group, complications occurred with HOB elevation compared to flat positioning (31.5% vs. 50.9%; $p < 0.001$). In the side-lying group, complication rates were similar regardless of HOB status (45.3% vs. 45.5%; $p = 0.975$).

Discussion: The influence of post-operative positioning on the incidence of airway obstruction for pediatric patients following adenoidectomy and/or tonsillectomy remains unknown. Anecdotal observations by nurses in a busy pediatric PACU were that fewer airway-related complications occurred among children younger than 6 years of age, recovered in a side-lying position following adenoidectomy and/or tonsillectomy compared to those in supine position. As such, impact of post-operative positioning was evaluated noting no difference in overall complications based on supine versus side-lying, however highlighting the potential role of HOB position.

Conclusion: Patients less than 6 years of age undergoing adenoidectomy and/or tonsillectomy, who arrived into the PACU supine with HOB not elevated had a greater incidence of PACU complications than those who arrived side-lying with HOB elevated.

Implications for perianesthesia nurses and future research: Findings of this work have led to practice changes when receiving patients into the PACU following adenoidectomy and/or tonsillectomy:

- Patients 5 years and younger, side-lying with HOB elevated
- Patients 6 years and older, supine with HOB elevated
- Future research: further evaluation of outcomes and airway-related complication rates based on this new positioning guideline.