

**Evaluation of the Effects of Ride-On Toy Car  
Use During Operating Room Transfer on  
Preoperative Anxiety and Postoperative  
Delirium in Preschool Children**

**Document Type:** Study Protocol  
**Ethics Committee Approval Date:** 22 October 2025

## **Brief Description**

This study aims to evaluate preoperative anxiety levels and postoperative emergence delirium in pediatric patients undergoing elective adenoidectomy and/or tonsillectomy. Children are transferred to the operating room either using a ride-on toy car or a standard hospital stretcher. Preoperative anxiety and postoperative delirium are assessed using validated pediatric assessment tools during the perioperative period.

## **Study Design**

This study is designed as a prospective observational study.

## **Study Population**

Male children aged 3–7 years scheduled for elective adenoidectomy and/or tonsillectomy under general anesthesia.

## **Eligibility Criteria**

Inclusion Criteria:

- Male patients aged 3–7 years
- ASA physical status I–II
- Scheduled for elective adenoidectomy and/or tonsillectomy
- Parental consent obtained

Exclusion Criteria:

- History of psychiatric, neurological, genetic, or developmental disorders
- Previous surgical experience
- Use of anxiolytic medication outside the study protocol

## **Study Procedures**

Participants will be enrolled on the day of surgery. Transfer to the operating room will occur either using a ride-on toy car or a standard hospital stretcher, depending on real-time availability.

## **Outcome Measures**

Preoperative anxiety will be assessed using the Modified Yale Preoperative Anxiety Scale (m-YPAS) and Visual Analog Scale for Anxiety (VAS-A). Postoperative emergence delirium will be assessed using the Pediatric Anesthesia Emergence Delirium (PAED) scale.

## **Timing of Assessments**

Preoperative assessments: waiting area, before transfer, during transfer, before anesthesia induction.

Postoperative assessments: immediately after extubation, upon arrival in PACU, and 30 minutes after PACU admission.

**Statistical Analysis**

Descriptive statistics will be used. Between-group comparisons will be performed using appropriate parametric or non-parametric tests based on data distribution. A p-value  $< 0.05$  will be considered significant.

**Ethics**

The study will be conducted in accordance with the Declaration of Helsinki. Ethics committee approval and written informed consent from parents/legal guardians will be obtained.