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Background: Our partnership with the Department of Anesthesiology at the Korle Bu Teaching Hospital (KBTH) in Accra, Ghana has provided our team with the opportunity to collaborate on the development of practice guidelines for the care of pediatric patients during the postanesthesia period. In recent years, the Modified Aldrete Score or adaptations have been used to objectively assess and “fast-track” children during the postoperative recovery period.¹ The objective of this collaboration was to determine whether this scoring rubric could also be used to develop practice guidelines for weaning oxygen as well as facilitating parental presence in phase I recovery.

Methods: Based on discussions with colleagues at the KBTH, we identify a desire to standardize the care of pediatric patients during the postanesthesia period. Our observations confirmed that the recovery area functioned as a phase I/II recovery unit without current need for rapid discharge. Therefore, we focused on the development of postanesthesia guidelines that would standardize practice with regard to oxygen utilization and reuniting parent with child in the recovery unit. The Modified Aldrete Score was reviewed and selected to be a component of our assessment criteria. A survey was developed to document current practice and track changes after implementation of the protocol.

Results: Our collaboration resulted in the creation of a recovery protocol focused on progressing care based on serial Modified Aldrete Scores with risk-adjusted administration and weaning of oxygen based on the presence of patient risk factors associated with increased need for supplemental oxygen therapy including: low Aldrete score (<6), sickle cell disease, respiratory infection, and thoracic surgery. Parents were introduced to the unit when stable ventilation and awareness criteria had been met (see figure 1). In addition, a survey was created to track the utilization of oxygen in the postanesthesia period at the KBTH as well as other time-based quality indicators.

Conclusion: Our collaboration with colleagues at the KBTH produced practice guidelines to objectively assess patients during the postanesthesia period, which were also used to wean oxygen as well as facilitate parental presence in the PACU. We conclude that collaborative international efforts to establish practice guidelines may have added value if they focus on interventions which conserve valuable resources, increase patient and family satisfaction, as well as promote patient safety.

References: 1. Patel RI, et al. Fast-tracking children after ambulatory surgery. *Anesth Analg* 2001;92:918-22
2. WHO Guidelines for Safe Surgery 2009 © WHO at www.who.int

Recovery Room Protocol

1. Record Oxygen Saturation upon admission to Recovery Room
 2. Start oxygen therapy if:
 - i. Low Aldrete score (≤ 6)
 - ii. SicMe cell disease
 - iii. Respiratory tract infection
 - iv. Chronic lung disease
 - v. (Recovering from) Has had thoracic or upper abdominal procedures
 - vi. Preoperative hypoxemia
 3. If above are absent and oxygen saturation $> 95\%$ consider trial without supplemental oxygen
 4. Continue to monitor oxygen saturations
 5. If oxygen saturations ever $< 95\%$, restart supplemental oxygen therapy
 - a. Nasal cannula: 2-4 L (if available and well tolerated)
 - b. Face mask: 6 L
 6. Continue to reassess pulse oximetry, need for supplemental oxygen and Mod. Aldrete score every 15 minutes.
 7. May bring parents back once:
 - a. Patient's ventilation is confirmed and stable
 - i. Auscultation
 - ii. Chest rise
 - iii. $SPO_2 > 95\%$ (on or off oxygen)
 - b. Patient is arousable on call
 8. Consider discharge of patient to ward once Modified Aldrete score > 8
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