Randomized controlled trial of the analgesic efficacy of single dose intravenous acetaminophen in adenotonsillectomy Patients

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Introduction

• Adequate pain control is an important component in the postoperative outcome for pediatric adenotonsillectomy patients with sleep disordered breathing (SDB)
• Intravenous acetaminophen appears to be a favorable analgesic adjunct due to its predictable pharmacokinetics and opioid sparing effect however its role in pediatric adenotonsillectomy pain management remains unclear

Methods

• Prospective randomized double-blinded controlled study
• Patients with the diagnosis of SDB who required extended postoperative admission received IV acetaminophen (15mg/kg) or saline placebo intra-operatively.
• Post anesthesia care unit (PACU) pain scores using Faces, Leg, Activity, Cry, Consolability were measured at 0,5,15,30,60 minutes
• Need and amount for breakthrough pain medication in the PACU and time to request for pain medication on the inpatient ward were examined in addition to total PACU time

Results

• 239 patients were included in data analysis with 118 acetaminophen group and 121 in saline placebo group
• No statistical significance was seen between groups with regard to average FLACC scores in the PACU, breakthrough PACU pain medications, amount of PACU pain medications or time to request for pain medication on the floor
• No statistical significance was seen with regard to total PACU time

Discussion

• Intraoperative administration of single dose intravenous acetaminophen to pediatric patients with SDB undergoing adenotonsillectomy does not provide any analgesic or recovery benefit versus saline placebo.

References