## An Evidence-Based Approach to Managing Pediatric Outpatient Ophthalmology Surgical Pain

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**Introduction:** Pediatric patients undergoing strabismus surgery frequently experience pain and distress during emergence from anesthesia that delays their discharge to home. Acetaminophen is a preoperative medication that has been routinely ordered for otolaryngology surgery to alleviate postoperative pain in the PACU.

**Identification of the Problem:** Ophthalmology surgery center does not routinely administer preoperative analgesics to pediatric patients. PACU nursing staff reported that their pediatric patients were very distressed and crying inconsolable during emergence from anesthesia and recovery.

**EBP Question/Purpose: PICO question:** What is the best evidence for administering acetaminophen as a preoperative/pre-emptive medication for outpatient pediatric ophthalmologic surgery to improve children's postanesthesia pain management?

P = Pediatric patients having ophthalmological same day surgery

I = Pre-emptive acetaminophen medication

C = No preoperative medication versus preoperative oral acetaminophen

I = Improved pain management during emergence from anesthesia

**Methods/Evidence:** Johns Hopkins Evidence-Based Practice Model for Nursing and Healthcare Professionals was used as a guide to appraise and level the evidence that supported the PICO question. PACU nurses from this academic freestanding surgery center appraised and leveled 10 articles that resulted in the following: four level I-A, two level III-A and four level V- A for quality. The total evidence recommended that acetaminophen was a superior pre-emptive mediation by improving the children's pain and comfort in the PACU on emergence from anesthesia.

**Significance of Findings/Outcomes:** Evidence overwhelmingly recommended that acetaminophen be administered to pediatric ophthalmology surgery patients before their surgery as its analgesic effects reduces pain and improves comfort for children emerging from anesthesia in PACU.

**Implications for perianesthesia nurses and future research:** Future research/clinical inquiry projects need to translate this evidence into practice by conducting a quality improvement project on preoperative administration of acetaminophen this population's pain and comfort recovery from anesthesia in PACU.