Increasing the use of intraoperative IV acetaminophen among pediatric dental, adenoidectomy and circumcision surgical patients.

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Clinical Issue/Background
- There is inconsistency in anesthesia practice regarding use of analgesics.
- Variation in anesthesia practice includes individual practitioners and types of surgeries.
- PACU nurses have observed these variations and questioned the narcotic-sparing effect of intraoperative IV acetaminophen.

Search Strategy
Keywords: Acetaminophen, Percalgan, paracetamol, pediatric, intra-operative, post-operative, analgesia, pain, opioids, English language
Databases: Medline, CINHL, Google scholar, PubMed, Nursing Reference Center, Scopus

Critical Appraisal
5 (2a) – Randomized Controlled Trials
The grade for the body of evidence is High.

Synthesis
- Five Randomized controlled trials (RCT’s) directly support a recommendation.
- All 5 of the studies demonstrated a decrease in postoperative narcotic use.
- 3 of the RCT’s were performed in the pediatric population. The remaining 2 RCT’s included adults and children in their population.
- The time frame for measurement for narcotic usage ranged from the immediate postoperative phase up to 72 hours.

Recommendation
It is strongly recommended that pediatric patients undergoing surgery receive intraoperative intravenous acetaminophen to decrease the amount of narcotics required in the post-operative phase.

Implementation
- Quality Improvement project initiated on July 2nd, 2014 with Anesthesia.
- The Aim of this project was to increase the percentage of pediatric surgical patients receiving IV acetaminophen during surgery at the Liberty Campus.

Evaluation
Percentage of pediatric surgical adenoidectomy, circumcision and dental patients that receive IV intraoperative acetaminophen increases from 75% to 95%.

Conclusions:
TJC recommends that hospitals use evidence-based actions to help avoid adverse events associated with the use of narcotics. By using a multi-modal approach, the use of IV acetaminophen a non-narcotic analgesic in combination with narcotics, can decrease the amount of narcotics required.

- Buy-in of all stakeholders is critical for improvement
- Understanding the reason behind an initiative is key to success
- Celebrating success is important to recognize staff accomplishments

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