

[NM-288] Effectiveness and Validity of Subjective vs. Objective Post-Operative Pain Scoring Systems on a Medical Mission to Guatemala

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Background: Studies have shown a difference in pain burden amongst different races and ethnicities.¹ With language and cultural differences, it can be difficult to accurately assess postoperative pain scores. We report a pediatric medical mission to Guatemala City, Guatemala, where we compared postoperative subjective and objective pain scores over the PACU course and how this relates to similar patients at Duke Children’s Hospital.

Methods: A perioperative team from Duke Children’s Hospital took part in a medical mission to Guatemala where 51 general and urologic surgeries were performed. After obtaining IRB approval, we performed a prospective, observational study, where we documented intraoperative pain management and measured objective (FLACC²) scores and subjective (Wong-Baker Faces³) scores during the patients’ stay in the PACU.

Results: 51 patients, ages 4 months to 17 years, received general anesthesia for general and urologic procedures. Of these, 84.3% received a regional block (21 caudals, 17 ilioinguinal-iliohypogastric nerve blocks, 4 transversus abdominis plane blocks, and 1 scalp block) (Figure 1). Intraoperative management consisted of ketorolac IV (90.2%), acetaminophen PO/IV (82.4%), and fentanyl IV titrated to effect. In PACU, 17/37(45.9%) of patients aged 3 - 17 years had subjective or objective signs of pain $\geq 2/10$. Of the 17 patients, 26 sets of subjective and objective pain scores had a mean difference of 3 (SD \pm 2), with the objective score being lower in 25/26.

Conclusions: Regional anesthesia techniques can be a valuable tool in managing post-operative pain in developing countries. It is important to attempt to communicate properly with these patients as objective and subjective pain scores can be incongruent. When relying only on objective scoring systems with identical thresholds for treatment of pain, practitioners risk undertreating post-operative pain in the PACU.

References:

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