Framework to Explain Progression of Pain in Obese or Overweight Children Undergoing Tonsillectomy

Shirley D. Martin PhD RN CPN, Lauri D. John PhD RN CNS

Abstract

An estimated 100,000 obese (OB) and overweight (OW) children undergo tonsillectomy each year in the United States. Pain management in this population is particularly challenging because of weight-based dosing, clinician fears, potential for airway obstruction, and genetic differences. A framework is proposed to explain factors involved in the post-tonsillectomy pain (PTP) experience in OB and OW children. The tonsillectomy, the body's inflammatory state, and mechanical stressors comprise influencing factors in PTP progression. Clinician-delivered medication doses, genetic variants of drug metabolism, and soothing factors serve as mediating factors in the progression of PTP. Postanesthesia care unit (PACU) nurses may use this framework to better understand PTP progression in OB and OW children. PACU nurses may manipulate certain mediating factors discussed in this framework to moderate PTP progression in OB and OW children. Researchers may use this framework to support future research to improve PTP management in OB and OW children.