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Intravenous Acetaminophen Reduces Opioid Use For Postoperative Pain In Obese Patients Undergoing Laparoscopic Cholecystectomy.

Abstract
Opioid-induced respiratory depression is categorized as a sentinel event, which is an unanticipated occurrence that may result in severe injury or death. Although the incidence of opioid-induced respiratory depression is 0.2 to 2%, this issue persists as a substantial basis of morbidity and mortality. The obese population has multiple physiologic elements that increase their risk for opioid-induced respiratory depression. This retrospective study examined if intravenous (IV) acetaminophen reduces opioid consumption in the postoperative period in obese patients who underwent a laparoscopic cholecystectomy. Adequately controlled postoperative pain provides for greater patient satisfaction, decreased hospital length of stay (LOS), and reduced costs for the medical facility. The inclusion criterion comprised patients within the ages of 18 to 65, a body mass index (BMI) greater than 30, and who underwent a laparoscopic cholecystectomy at the designated medical facility. Exclusion criteria included patients with a known allergy to acetaminophen; severe hepatic impairment, chronic alcoholism or use of opioids, and malnutrition; severe hypovolemia, or renal impairment. The independent group t-test was used to compare the (a) amount of opioids administered in the post anesthesia care unit (PACU), (b) amount of opioids administered for the entire LOS, and (c) LOS between the two groups. There was a significant difference found in all of these factors. A considerable finding of this capstone project was the mean cost for patients who received IV acetaminophen was $1,143.60, compared to $1,406.00 for those who did not receive IV acetaminophen. This price difference was due to the variance in the total LOS.