Abstract

Anesthetic adverse events are a major concern to every anesthesia provider. Traditionally, the focus has been on intra-operative problems and complications. This investigation focused on significant complications that developed during the post-operative period at Providence Sacred Heart Medical Center. This retrospective chart review investigated patients that had experienced physiologic instability in the post anesthesia care unit (PACU). It also investigated the occurrences of strokes, cardiopulmonary arrests, and patients that had expired death within a 30 day time frame following any anesthetic requiring procedure. The results discovered that hypertension was the number one hemodynamic issue in the PACU. It was also uncovered that ASA II patients, and spinal hypotension represented a significant preponderance of the hemodynamic issues in the PACU. Among the stroke population, 54% had etCO2’s maintained intraoperatively between 25-30 mmHg. It was also noted that 77% of patients woke from surgery with a normal neurological exam and thus suffered their strokes after a normal wake-up within the first three days postop. Among the patients that suffered cardiovascular arrest and death, there was a high preponderance of patients with ASA III and IV classification, advanced age, and multiple preexisting comorbidities. The authors suggest recommendations for dealing with hypertension and spinal hypotension in the PACU. Emphasis is placed on lessening the trend of hypocapnia intraoperatively and the benefits of hypercapnia to patient physiology are emphasized. Treatment modalities for patients that suffer cardiopulmonary arrests and deaths postop remain challenging other than the identification of patients most at risk and to lessen the anesthetic threat to these individuals.