

THE RELATIONSHIP BETWEEN MEAN ARTERIAL PRESSURE AND PHYSICAL STATUS OF THE AMERICAN SOCIETY OF ANESTHESIOLOGISTS WITH POST-OPERATIVE NAUSEA AND VOMITING IN POST-LAPAROTOMY PATIENTS UNDER GENERAL ANESTHESIA AT IHC LAVALETTE MALANG HOSPITAL

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ABSTRACT

Postoperative Nausea and Vomiting (PONV) is the most common complication after surgery under general anesthesia and can reduce patient comfort, prolong hospitalization, and pose risks such as dehydration, electrolyte disturbances, surgical wound rupture, and pulmonary aspiration. Identifying factors associated with PONV is crucial for improving patient safety and the quality of perioperative care. Mean Arterial Pressure (MAP) assesses the stability of organ perfusion during surgery, while the American Society of Anesthesiologists (ASA) physical status describes the patient's physiological condition that can influence the response to anesthesia. This study aimed to analyze the relationship between MAP and ASA status with the incidence of PONV in patients after laparotomy under general anesthesia. This was a quantitative correlational study with a cross-sectional design in 43 patients selected through purposive sampling. Bivariate analysis was performed using the Spearman Rank test, while multivariate analysis used ordinal logistic regression. The results showed that most respondents experienced severe PONV (53.3%). MAP had a significant relationship with PONV ($p=0.004$; $r=-0.402$), indicating a moderate negative relationship. ASA status showed a stronger relationship ($p=0.000$; $r=-0.583$). Simultaneously, MAP and ASA significantly influenced PONV ($\chi^2=18.629$; $p=0.000$). However, in multivariate analysis, only ASA remained significant as a predictor of PONV ($p=0.006$). Conclusion: There is a significant relationship between Mean Arterial Pressure and American Society of Anesthesiologist physical status with Post Operative Nausea and Vomiting in post laparotomy patients with general anesthesia. Suggestions for nurses are expected to conduct a comprehensive ASA status assessment and hemodynamic monitoring, especially Mean Arterial Pressure, as an effort to prevent and manage postoperative PONV.

Keywords: Mean Arterial Pressure, American Society of Anesthesiologists physical status, Postoperative Nausea and Vomiting, laparotomy, general anesthesia.