Implementation of the ASPAN Evidenced-Based Clinical Practice Guidelines for the Prevention and/or Management of PONV/PDNV in an Ambulatory Surgical Population

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Introduction/Problem: ASPAN published clinical practice guidelines for the prevention and management of PONV/PDNV in 2006. These guidelines identified the feasibility of guideline implementation and the impact of guidelines on expected patient outcomes as priorities for research. ASPAN also recognizes studies examining the effect of use of its clinical practice guidelines on patient outcomes as one of its top ten research priorities.

Purpose: The purpose of this study was to determine if the ASPAN PONV/PDNV guidelines were appropriately applied in the management of adult ambulatory surgical patients at a large academic medical center and the influence of these guidelines on the incidence of PONV/PDNV.

Methodology: The study involved secondary data analysis of data collected as part of a multicenter study whose purpose was to develop a simplified risk model for the prediction of PDNV. Data analysis included descriptive statistics and correlation.

Results/Discussion: There was a very weak positive correlation ($r = 0.21, N = 94, p = 0.004$) between PONV/PDNV risk factors and anti-emetic medications administered indicating poor adoption of the guidelines. Results demonstrated that those administered more prophylactic anti-emetic medications had a lower risk of PONV/PDNV. The incidence of PDNV was 2–3 times the incidence of PONV in this group.

Conclusion/Implications for Practice & Research: Implementation of practice guidelines has remained low, even in light of proven patient benefit. The poor correlation between risk factors and anti-emetics administered indicates poor adoption of the ASPAN guidelines by anesthesia providers. Poor guideline adoption prevented the assessment of the efficacy of the guidelines in this study. Clinically, data suggested administration of more anti-emetics than recommended by the guidelines resulted in decreased incidence of PONV/PDNV. Research should focus on the disparity between the incidence of PONV and PDNV. Additionally, research testing the efficacy of this guideline should be conducted in a study where the guideline is strictly adhered to.