



ANALYSES OF THE POSTOPERATIVE NAUSEA AND VOMITING FROM DIFFERENT ANESTHESIA APPROACHES TO IMPROVE THE QUALITY OF POSTOPERATIVE CARE AFTER SURGERY

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INTRODUCTION

Postoperative nausea and vomiting (PONV) are common side effects for patients after surgery. In recent years, with the efforts to improve the quality of medical care and pay attention to the health of patients, the management of PONV has been strengthened. How different anesthesia approaches will affect PONV becomes an important clinical care issue and is worth further research. Nevertheless, limited study exists in Taiwan. This study aims to apply medical data to investigate such issues in detail.

AIM

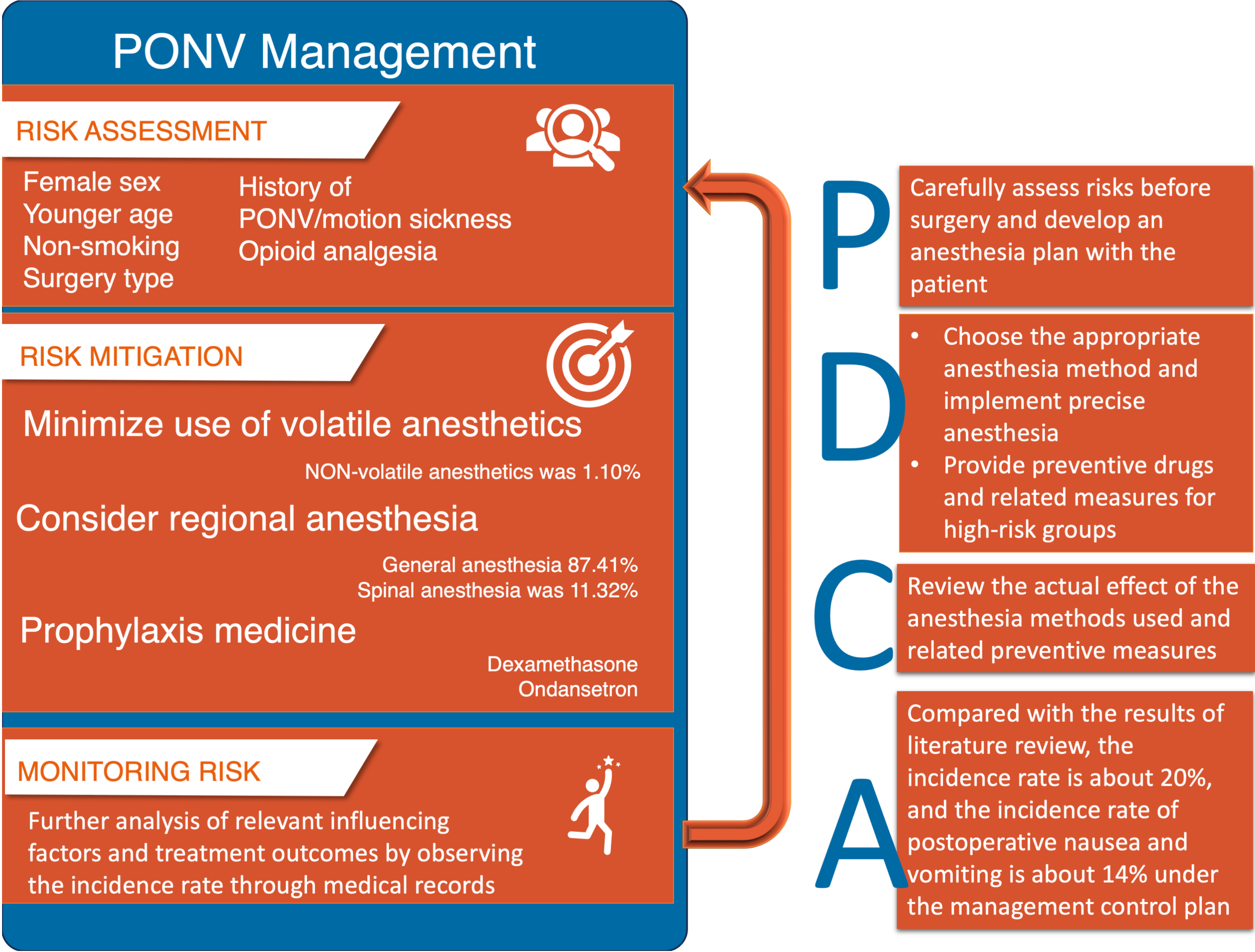
Medical data were collected from a medical center with 1,482 beds located in southern Taiwan. Observe the occurrence of nausea and vomiting after surgery, the incidence of high-risk groups and whether the use of preventive drugs can slow down PONV

METHOD

- Anesthesia visit data after operation and pre-operation visit information combined with electronic medical records were collected from July 2019 to June 2021 to examine the incidence of PONV after surgery, the effect of satisfaction, and the differences related to genders and surgical departments
- Postoperative anesthesia visit data combined with medication records were observed from July 2021 to December 2021 to further explore the potential influences of different anesthesia and surgical treatments on PONV. Statistical analyses include descriptive analyses, the Chi-square test, and logistic regression.
- This study received IRB approval from the Kaohsiung Veterans General Hospital, Taiwan (KSVGH22–CT4-13).

RESULTS

The incidence of PONV is 14% from July 2019 to June 2021 which is much lower than previous studies of 20% to 30 %. The incidence of nausea and vomiting in women after surgery is about 75.53% which is significantly higher than in men (p<0.05). Smoking status and previous history of PONV were significant factors that affected PONV occurrence (p<0.05). The incidence rate of PONV for general anesthesia was 87.41%, for spinal anesthesia was 11.32%, and for intravenous anesthesia was 1.10% (p<0.01). Preventive medication use such as Dexamethasone (insurance reimbursed) had a higher risk of PONV (OR: 1.20, 95% CI: 1.02-1.42) than Ondansetron (at patient's own expense) (p=0.024). Total Knee Replacement surgery had a higher risk of PONV (OR: 2.47, 95% CI: 2.05-2.99) than other surgery (p<0.01).



CONCLUSIONS

This study provides valuable references for clinical staff to conduct effective anesthesia strategies for caring for high-risk groups of PONV. We suggest that future clinical care can integrate complete care before, during, and after surgery to improve the medical quality of patients.

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