

POSTOPERATIVE NAUSEA AND VOMITING RESCUE USING AROMATHERAPY

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Postoperative nausea and vomiting (PONV) is a common complication of surgery and occurs in 20-30% of patients. Antiemetic medication reduces incidence, but does not reliably prevent PONV that can lead to dehydration, electrolyte imbalance, prolonged recovery, and decreased patient satisfaction. Thus, effective rescue treatment for PONV that occurs after surgery is needed. The negative effects of conventional pharmacological approaches (sedation, hypotension, and cost) have spurred researchers to explore alternative therapies.

The purpose of the study was to investigate the effectiveness of aromatherapy agents on the treatment of PONV for patients after receiving surgery.

A randomized controlled trial of 3 aromatherapy agents (ginger, isopropyl alcohol, and a blend of oils) and Normal Saline as the control at one surgical site was completed. IRB approval received. Eligibility was adult patients, ability to give consent, no history of coagulation problems, and no allergies to the aromatherapy agents. Before surgery, demographic information, risk factors, and any antiemetic medications received was collected. After surgery, participant's nausea was rated using a Likert Scale of 0-3. Those reporting nausea were randomly given one of the agents on a gauze pad and instructed to inhale the aroma. After 5 minutes they were asked to rate their nausea again. Antiemetic medication was given as requested.

Analysis used SAS software for descriptive statistics and the Wilcoxon rank sum test to compare the intervention aromatherapy agents to the control, along with 95% confidence level and a Bonferoni adjustment for multiple comparisons. There was a final sample of 1151 consenting patients with 301 reporting PONV (26.15%). Nausea rate for those at moderate or high risk receiving preventative medication was 35.53%. Change in nausea was significant for the aromatherapy blend ($p=.0001$), ginger ($p=.0006$), and not significant for alcohol compared to Normal Saline. The number of antiemetic medications requested after aromatherapy was reduced significantly by the type of aromatherapy.

In conclusion, aromatherapy for rescue treatment of PONV is a valid alternative. Aromatherapy offers many benefits over pharmaceutical agents alone. It reduces PACU length of stay, easy to administer, does not require IV access, and is less costly. Further research should be conducted testing the length of time aromatherapy is effective, and if administering in the preoperative area reduces incidence of PONV.