EVALUATION OF CONTROLLED BREATHING WITH OR WITHOUT PEPPERMINT AROMATHERAPY FOR POSTOPERATIVE NAUSEA AND/OR VOMITING RELIEF
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Introduction. Postoperative nausea and/or vomiting (PONV) is one of the most predictable indicators of extended postoperative stays and unplanned admissions. Medications used to alleviate PONV are costly and are associated with adverse reactions.

Introduction of problem. Although aromatherapy is a lesser known PONV therapy in the US, it is common in the United Kingdom, Canada and Australia. Limited literature supports it use.

Study purpose. This research was designed to evaluate peppermint aromatherapy for relief of PONV in patients receiving general anesthesia for elective procedures.

Methodology. For this randomized control trial, adults, ASA class I or II, capable of verbalizing PONV symptoms and able to breathe through the nose were eligible. Subjects were randomly assigned to receive aromatherapy with controlled breathing or controlled breathing alone. Upon PONV complaint, symptom(s) were assessed (0-10). Instructions were to breathe deeply through the nose, hold the breath, and exhale slowly through the mouth for 3 breaths. Experimental subjects inhaled the aroma from peppermint extract (500 microliters) concurrently. Reassessment occurred after 5 minutes; if necessary treatment was repeated. Following a second 5-min interval, persistent symptoms were rescued with medication. Intervention effectiveness equaled absence of symptoms, while efficacy was defined as resolution of symptoms, i.e., no rescue with antiemetics, at endpoint.

Results. Subjects were enrolled over 18 months (N=331); analysis was performed on subjects completing the study (n=220). Mean ages of experimental (46.4 ±15.2 yr, n=108) and control subjects (47.4 ±15.1 yr, n=112) were similar (p=.656). PONV incidence was uncommon (18.2%) with most symptomatic subjects female (33/40). Controlled breathing alone proved 46.2% effective and 61.5% efficacious, while aromatherapy with controlled breathing was 38.5% effective and 55.6% efficacious.

Discussion. Data revealed controlled breathing to be more effective and efficacious than the experimental intervention, which does not support previously published research. The randomized controlled study design with metered aromatherapy improves upon previous studies.

Conclusion. The treatment of PONV with either controlled breathing alone or combined with peppermint aromatherapy was efficacious for over 50% of PONV episodes.
Implications for perianesthesia nurses. An inexpensive, readily available alternative to prescribed medications with no known side effects can successfully relieve PONV. Further studies could evaluate the cost-effectiveness and alternate delivery routes of aromatherapy.