Aromatherapy: Using Essential Oils to Decrease Post Operative Nausea and Vomiting in Adult Ambulatory Surgery Patients

Ma Fe Chase
Providence St. Joseph Health, mafe.chase@providence.org

Lori Penney
Providence St. Joseph Health, lori.penney@providence.org

Follow this and additional works at: https://digitalcommons.psjhealth.org/stvincent-bootcamp

Part of the Nursing Commons

Recommended Citation
https://digitalcommons.psjhealth.org/stvincent-bootcamp/1

This Book is brought to you for free and open access by the St. Vincent Medical Center, Portland, OR at Providence St. Joseph Health Digital Commons. It has been accepted for inclusion in All Nursing Boot Camp Posters by an authorized administrator of Providence St. Joseph Health Digital Commons. For more information, please contact digitalcommons@providence.org.
Aromatherapy: Using essential oils to decrease post operative nausea and vomiting in adult ambulatory surgery patients

MaFe Chase, BSN, RN, Lori Penney BSN, RN, CAPA

Background

Post operative nausea and vomiting (PONV) is a common issue associated with surgery and anesthesia. Nearly one third of patients undergoing surgery experience nausea and current medication intervention often have sedation as an adverse effect that can delay recovery, transfer and discharges. Anti-emetic medication for higher risk patients may reduce but does not totally prevent PONV which causes discomfort, fatigue, dehydration and risk of aspiration (O’Malley, 2016). PONV may be responsible for safety, falls, increased cost and workload of nursing staff (Steele, 2014).

Studies support use of essential oils ginger, peppermint, spearmint and cardamon or a combination of these for post anesthesia nausea and vomiting (Hunt, 2012). Inhaled vapor of essential oils not only reduced the incidence and severity of nausea but also decreased antiemetic requirements (Lua, 2012).

A recent study at the Clinical Decision Unit (CDU), an acute care setting at Providence St. Vincent Medical Center (PSVMC) concluded that inhaled essential oil of ginger appears to be effective in reducing symptoms of nausea and vomiting.

Purpose

There is limited evidence supporting aromatherapy for PONV. This study was also conducted to test whether Aromatherapy was as promising for surgical patients as it was for CDU patients.

Aromatherapy was also suggested to be used at Providence St. Joseph Hospitals due to medication shortages of antiemetic.

PICOT: Does Aromatherapy using essential oil of ginger decrease post operative nausea and vomiting in an adult ambulatory surgery setting for patients older than 21?

Methods

This is a prospective IRB approved study for patients experiencing post operative nausea and vomiting, who were over 21 years old, not pregnant, English speaking and without bleeding disorders. The study was conducted at PSVMC, a 523 beds, tertiary care, Magnet designated hospital in the Short Stay Unit (SSU) which is a 52 bed Pre/ Post Operative Unit.

The patients were screened in the pre-operative area by the Primary Investigators (PIs). SSU RNs informed the PIs of potential candidates for the study. The PIs then reviewed the charts for inclusion.

The patients were asked for the degree of nausea using the Likert Scale ranging from 0 (no nausea), 1 (mild), 2 (moderate), 3 (severe nausea) and only patients with mild to severe nausea were provided with inhalation of ginger essential oil therapy.

Essential oil of Ginger inhaler sticks were given to each participant. Instructed to hold inhaler 1/2 to 1 inch below the nose, inhale slowly for a count of 5 and then slowly breathe out for a count of 5 and repeat the process two or more times.

At 30 minutes post therapy, patients were again asked the degree of nausea. Each patient's nausea level before and after aromatherapy were compared using Chi-squared statistics.

Results

A total of 103 patients were consented, 24 (23%) patients reported nausea and of these, 88% reported a decrease in their nausea symptoms. (p = .0001)

Average nausea score pre aromatherapy was 2.21 and 30 minutes after aromatherapy was 0.96.

A total of 72% of patient's did not require any antiemetic medications and 20% of patients' relief lasted as long as a prescription antiemetic, 6 hours or longer, before requiring an antiemetic. Only only 8% needed antiemetic medication within 6 hours after aromatherapy inhaler.

Data

Severity of Pre and Post Nausea

Discussion/Conclusions

The use of aromatherapy using essential oils of ginger for PONV was shown to decrease nausea in majority of the patients that received the inhaler. In the study Aromatherapy was effective in 88% of patients and lasting as long as an antiemetic medication in 92% of the patients. Due to the shortage of the current antiemetic, aromatherapy will be an effective adjunct treatment for PONV.

Limitations include a small sample size with the availability of only two PIs to instruct and record the outcomes, study time frame, and study design. The study was limited to adult surgical patients and therefore cannot conclude that the findings could apply to all patients. The investigators recommend replication of the research for other patient populations including obstetrics, pediatrics, and oncology patients using aromatherapy as an adjunct therapy along with antiemetic medications.

Conclusion: The use of inhaled aromatherapy with essential oils of ginger is effective in reducing PONV for adult surgical patients.

References