

Reducing Rescue Antiemetic Use in the PACU Following Bariatric Surgery by Implementation of Aromatherapy

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Purpose

Post-operative nausea and vomiting (PONV) can affect many aspects of a patient's recovery. Not only is it an unpleasant experience, but it can require additional medications that can have side effects like excessive drowsiness, hypotension, and dry mouth (Hodge, McCarthy, & Pierce, 2014). It can also prevent adequate oral intake causing dehydration and electrolyte imbalances and can increase length of stay in both the Post-Anesthesia Care Unit (PACU) and in the hospital (Suh, et al., 2019).

The average incidence of PONV in the US is between 20-30% (Asay, Olson, Donnell, & Perlman, 2019). However, it has also been noted that certain surgeries seem to have higher incidence of PONV. Up to 65% of patients recovering from bariatric surgeries including gastric bypass, gastric sleeves, and duodenal switches can experience PONV (Suh, et al., 2019). Our bariatric surgery group was already implementing a protocol using preoperative medications to decrease this likelihood of PONV but approached our PACU team about instituting aromatherapy to help these patients avoid this postoperative side effect even further.

Multiple research studies have shown a benefit to using aromatherapy for treatment and prevention of PONV. Implementing aromatherapy is intended to be a complimentary therapy to our already utilized preoperative and postoperative regimen of antiemetic medication administration, not as an alternative therapy to medications for the patient experiencing PONV.

Administering the Aromatherapy

The elequil aromatabs are available in Lavender and Orange-Peppermint scents at UPMC Hamot. They are nurse driven and available without a physician order. Patients are encouraged to pick which scent they prefer if awake enough and able. The aromatab is a sticker that is applied to the gown with a patch inside of a sealed plastic cover that has the aromatherapy essential oils. The sealed plastic cover is torn open to the level desired (minimum to maximum scent), the backing of the sticker is removed, and the aromatab is placed on the patient gown with the open end towards the face. The scent last for up to 8 hours and can be replaced as necessary.

Advantages of Aromatherapy

- ❖ Readily available/nurse driven/no order needed
- ❖ Few side-effects
- ❖ Cost-effective
- ❖ Patients can use after leaving PACU, keep on them
- ❖ Can possibly have calming/relaxing effects as well

Methodology

An analysis of the average use of antiemetic medications administered in PACU to bariatric surgery patients prior to use of aromatherapy ensued. The antiemetic medications we searched for included Zofran, Phenergan, Reglan, Decadron, and Haldol if they were ordered for use to treat nausea as these are the most frequently used and readily available in our PACU. The bariatric surgery patients included were age 16 and above that had received gastric bypass (Roux-en-Y), gastric sleeve, or duodenal switch surgeries. Exclusion criteria included patients under the age of 16, those that refused the use of aromatherapy, or allergies to any of the ingredients within the aromatherapy products.

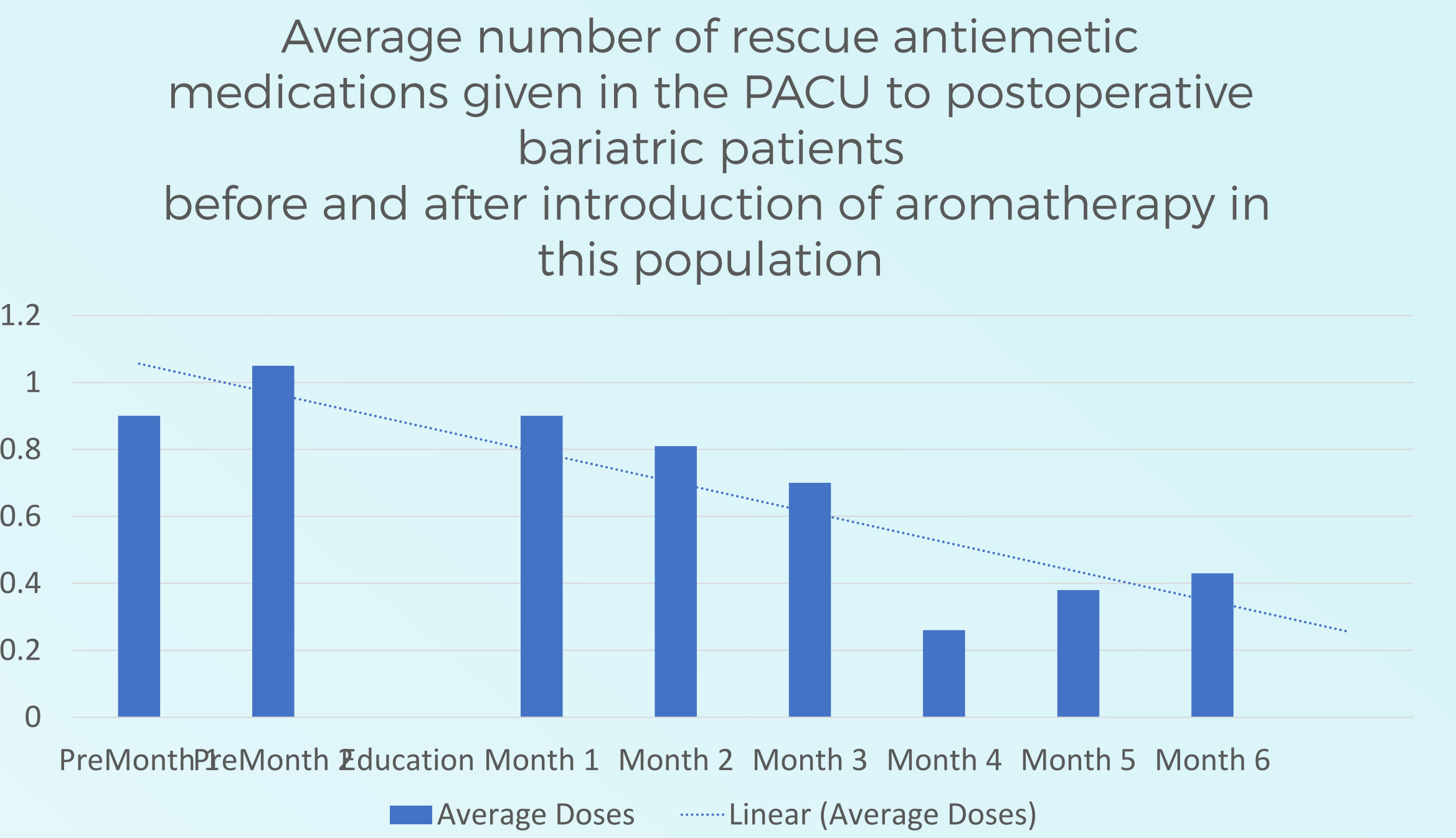


During the time we collected this baseline information, we obtained the aromatherapy product and educated our staff on the correct administration and indications for this product. Upon arrival to the PACU, patients meeting above criteria will have the aromatherapy applied immediately to their gown by the PACU nurse. If the patient is awake enough, they will be offered a choice of scent, if they are not awake enough to decide which they prefer the therapy will not be delayed and the nurse may choose a scent for them. After placing the aromatherapy for these patients, no other changes are to be made to the usual care they would receive. Staff were instructed that if the patient complained of nausea and/or vomiting, the typical interventions should be used including rescue antiemetics, cool washcloths, fans, repositioning, rest, etc.

Following the implementation of aromatherapy and an adequate time to build the use of aromatherapy for these patients into the PACU routine, we again noted the number of antiemetic medications that were administered in the PACU to observe if any changes had occurred for these patients.

Results

The number of doses of rescue antiemetic medication given per month to this population are divided by the number of patients per month for the average dose per patient. Prior to initiation of aromatherapy:
Month 1: 30 patients / 27 doses = 0.90 average doses per patient
Month 2: 22 patients / 23 doses = 1.05 average doses per patient
After Initiation of aromatherapy and teaching period:
Month 1: 31 patients / 29 doses = 0.90
Month 2: 27 patients / 22 doses = 0.81
Month 3: 27 patients / 19 doses = 0.70
Month 4: 27 patients / 7 doses = 0.26
Month 5: 26 patients/ 10 doses = 0.38
Month 6: 23 patients / 10 doses = 0.43
Patients are receiving less rescue antiemetic medications in the PACU following implementation of aromatherapy on arrival to the unit.



Conclusion

A decrease was noted in the total number of rescue antiemetics required for patients after bariatric surgery when consistently using elequil aromatabs upon arrival to the PACU. Due to this success we will continue to use aromatherapy for this population and are looking into ways to implement aromatherapy further in other high-risk populations. We have also received positive feedback from patients in their overall satisfaction with our efforts towards treating their nausea and vomiting and have heard positive feedback on the relaxing effect from the aromatherapy use as well. Something perhaps for future consideration.

References / Literature

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