

Aromatherapy and Its Effect on Post-Operative Nausea and Vomiting (PONV) In the Patient Undergoing Bariatric Surgery

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Background

- PONV occurs in up to 80% of high-risk patients who receive bariatric surgery.
- Alternative and holistic multimodal treatment options, such as aromatherapy, have been shown to alleviate or lessen many negative effects and enhance overall comfort, including PONV, in surgical patients (Asay et al., 2019; Wang et al., 2024)
- Literature revealed a deficiency of studies that were context-specific to patients recovering from bariatric surgery.
- This study measured: effects of aromatherapy (QueaseEASE) on PONV, PONV severity, patient length of stay, concurrent anti-emetic administration, and patient satisfaction.

Methodology

- A quasi-experimental and retrospective cohort design was used
- A total of 31 participants consented to receive the aromatherapy intervention during their PACU stay, while 50 participants were in a 6-month retrospective control group
- Compared anti-emetic use, length of stay, and demographic data to examine their influence and association with PONV management after receiving aromatherapy.

Use of Antiemetics Post-Operatively

Incidence of PONV and required medication?	Control N (SD)	Intervention N (SD)	OR	p
No	21 (27.37)	23 (16.63)	0.25	.006*
Yes	30 (23.63)	8 (14.37)		

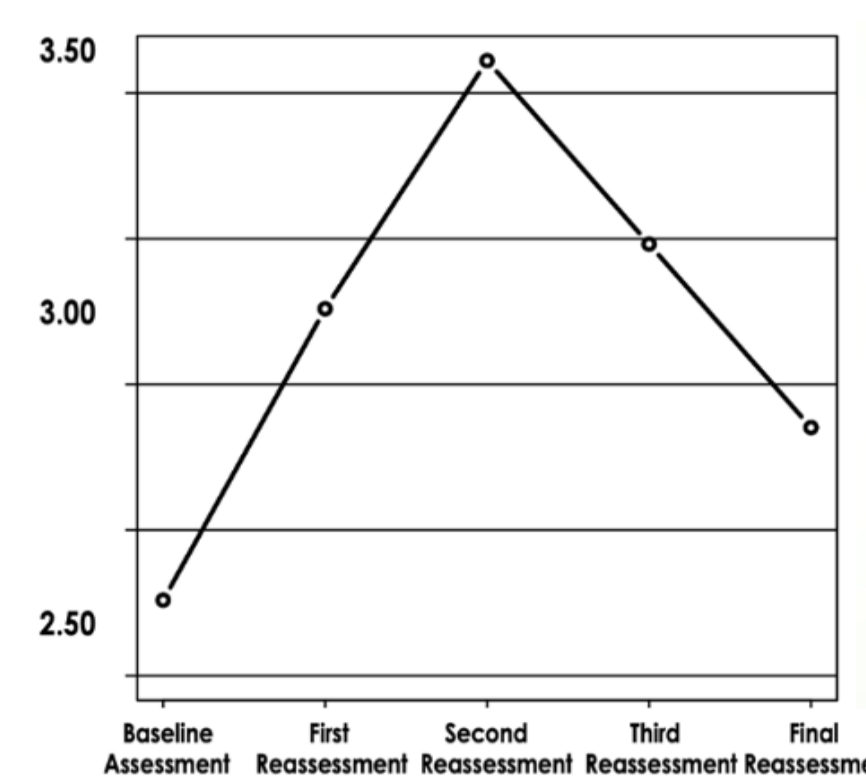
Achieved statistical significance (p<.05)

Length of Stay

Variable	Control		Intervention		U	z	p
	Mean Rank	N	Mean Rank	N			
Length of Stay (minutes)	41.19	51	42.02	31	774.50	-0.15	.878

Length of stay differences between the control group and the aromatherapy group. No change in mean length of stay in the PACU

Mean Changes in Nausea/Vomiting in Patients with PONV with Aromatherapy



(p<.05)

Variable	N	Mean Rank	χ ²	df	p
Baseline PONV (required medication)	12	2.67	11.48	4	.022*
Initial Assessment of PONV	12	3.00			
Second Reassessment of PONV	12	3.46			
Third Reassessment of PONV	12	3.11			
Final Reassessment of PONV	12	2.76			

*Achieved statistical significance

Patient Satisfaction of Aromatherapy in Aromatherapy Group with PONV

- 71% would request aromatherapy in the future
- 64% found an improvement in symptoms
- 67% found an improvement in satisfaction
- 53% felt it enhanced recovery
- 53% planned to take the device home

Practice Implications

- Utilizing this current research to guide practice will aid in reducing PONV with bariatric surgical patients.
- Using non-pharmacological treatments will reduce the need for anti-emetics
- Side effects of medications will be reduced
- Further research should involve a larger cohort to strengthen the results.

References

