

The Use of Peppermint Essential Oil to Reduce PACU Length of Stay

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Introduction: Voiding is one of the discharge criteria in PACU at Texas Children's Pavilion for Women. Inability to void within two hours is a leading cause of delay in PACU discharge.

Identification of the Problem: Post-operative urinary retention (POUR) is one of the possible complications that can occur after surgery which is a most common occurrence after gynecological surgery (Geller, 2014) and high risk for those having incontinence procedures (Jackson et al, 2018). Patients who had an indwelling foley catheter, straight catheterization during or at the end of surgery may experience bladder and urethral spasms, pain or discomfort that can interfere with their ability to urinate (Ghoshal, 2023).

QI Question/Purpose of the Study: The purpose of this quality improvement (QI) project is to determine whether peppermint essential oil will reduce discharge delays in the PACU among the women who had undergone gynecological same day surgery procedures.

Methods: Criteria include all day surgery patients excluding pregnant or breastfeeding, below 18 years of age, has allergy to peppermint, with history of cardiac fibrillation, G6PD and refusal. After an hour in recovery, patients are informed of PEO use, verbal consent obtained then encouraged to void, assisted to the toilet then nurse places 3 drops of PEO on the hat and instructed the patient to void as usual, encouraging to relax and slowly inhale the rising vapors of PEO. If voiding is unsuccessful, a second or third attempt with PEO is tried.

Outcomes/Results: Data collection in December 2024-March 2025 yielded 718 patients. Retrospective chart review shows 258 patients prior to implementation and 360 during the implementation of PEO use. Outcome results show that No delays in PACU discharge was 30% during PEO implementation compared to 24% without PEO use.

Discussion: Retrospective chart review and data collection shows 6% improvement in No Delays in PACU discharges and 2% reduction in delayed voiding. However, the data does not include whether the patients have used PEO or not.

Conclusion: The use of PEO may facilitate voiding in post-op gynecological day surgery patients to meet discharge criteria and reduce PACU LOS.

Implications for parianesthesia nurses and future research: Further research is necessary to study the correlation between PEO, post-op voiding and quality outcomes in the PACU.