

## **What a PAIN! Easing the PIV Insertion Process**

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**Background Information:** In the perioperative department, the pre-operative phase of care involves many tasks – one of which is to place the peripheral intravenous catheter (PIV). Research has shown that stress in the preoperative phase causes delays and a reduction in on time starts therefore negatively affecting patient outcomes and the patient experience. Practice has shown that preparing for insertion of the PIV can elicit enough stress and anxiety in the patient to cause a vasovagal reaction. How can the pre-operative nurse help the patient through what is often reported to be the most-remembered and negative experience while remaining efficient and supportive?

**Objectives of Project:** The goal was to alleviate stress and diminish pain for the patient during PIV insertion by utilizing a topical anesthetic for the PIV insertion site.

**Process of Implementation:** A topical anesthetic skin refrigerant was utilized during PIV insertion. Pain during PIV insertion was measured for all patients over a four-week period. Utilizing a numeric pain scale, the patient-reported pain value of those who received the product was compared against those who did not. Gender, age, PIV insertion site, and the patient-reported pain scale during this pre-operative task were noted.

**Statement of Successful Practice:** Patients who received the product during PIV insertion reported an average pain of 2.7 out of 10 while those who did not receive the product reported an average pain of 3.7 out of 10. Surprisingly, there was no significant correlation in patient-reported pain considering and comparing the factors of gender, age, and PIV insertion site. An unplanned additional success was the improved confidence of the bedside nurses while placing PIVs. Nurses reported that the utilization of the topical anesthetic skin refrigerant distracted the anxious patients during PIV insertion, therefore allowing the nurse to have more confidence and less distraction during the task.

**Implications for Advancing the Practice of Perianesthesia Nursing:** Utilizing a product to diminish patient-reported pain (although minimally) can improve the patient and nursing relationship. Further practice in the perioperative setting should explore use of other non-invasive products and tactics to alleviate stress, diminish delays, improve the patient experience, and boost the confidence of the pre-operative registered nurse.