NURSE-RATED EASE OF CARE, SATISFACTION, AND PATIENT MOBILITY WITH FENTANYL IONTOPHORETIC TRANSDERMAL SYSTEM (FENTANYL ITS) VERSUS IV PCA MORPHINE FOR POST-OPERATIVE PAIN MANAGEMENT: A POOLED ANALYSIS OF 3 RANDOMIZED, CONTROLLED TRIALS

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Purpose: An important concern for nurses treating postoperative patients is the convenience and time efficiency with which they are able to administer patient-controlled analgesia (PCA). Nurse’s overall satisfaction with the postoperative pain management modality and perception of patient mobility also have implications for the quality of overall postoperative care.

Methods: Data from three multi-center, randomized, controlled trials of fentanyl HCl iontophoretic transdermal system (fentanyl ITS) (IONSYS; Incline Therapeutics, Inc., Redwood City, CA) compared to IV PCA morphine for acute postoperative pain in adults were pooled for an integrated summary of nurse’s assessments of overall ease of care, satisfaction, and patient mobility. These studies utilized a 22-item nurse ease of care questionnaire that has been tested to confirm its content and psychometric validity.

Results: A total of 1961 patients were enrolled across the three studies; 969 patients received fentanyl ITS and 982 received IV PCA morphine. Overall ease of care as assessed by nurses was superior for fentanyl ITS compared to IV PCA morphine (LS mean [95% confidence interval] = 0.58 [0.53, 0.63] vs. 1.15 [1.10, 1.20], respectively; p<0.0001). Fentanyl ITS also was rated as less time-consuming (0.69 [0.63, 0.74] vs. 1.26 [1.20, 1.31] and less bothersome (0.46 [0.41, 0.51] vs. 1.03 [0.98, 1.08] than IV PCA morphine (both comparisons, p<0.0001). Nurse ratings of patient mobility were better for fentanyl ITS compared to IV PCA morphine (p<0.0001). Additionally, nurse satisfaction with the pain management delivery system was greater with fentanyl ITS compared to IV PCA morphine (3.94 [3.89, 3.99] vs. 3.45 [3.40, 3.51], respectively; p<0.0001).

Conclusions: Results from this pooled analysis demonstrate that an easy-to-use PCA modality such as fentanyl ITS has the potential to enhance convenience and time-efficiency with which nurses care for postoperative patients, resulting in a high degree of nurse satisfaction, while improving patient mobility compared to IV PCA.