Patient-controlled analgesia: patient and nurse satisfaction with intravenous delivery systems and expected satisfaction with transdermal delivery systems.

Gan TJ, Gordon DB, Bolge SC, Allen JG.

Source

Department of Anesthesiology, Duke University Medical Center, Durham, North Carolina 27710, USA. GAN00001@mc.duke.edu

Abstract

OBJECTIVE:

To compare patient and nurse satisfaction with intravenous patient-controlled analgesia (IV-PCA) to their prospective satisfaction with patient-controlled transdermal delivery system (PCTS) technology.

METHODS:

Nationwide samples of 301 nurses (200 medical-surgical, 101 post-anesthesia care units) and 500 surgery patients (192 abdominal, 119 gynecological, 189 orthopedic) completed self-administered, Internet-based questionnaires. Respondents indicated satisfaction with attributes of IV-PCA and, after reading a description of PCTS, indicated prospective satisfaction with comparable attributes. Within patient and nurse samples, half rated IV-PCA first (and later re-rated overall satisfaction) and half rated PCTS first. Paired comparison t-tests were used to determine significant differences in satisfaction for IV-PCA and PCTS attributes.

RESULTS:

Nurses reported significantly higher satisfaction with PCTS for patient and nurse ease of use, safety, and tolerability (p < 0.001 for all); and higher satisfaction with IV-PCA for the ability to vary drugs (p < 0.001) and doses (p < 0.001), deliver basal doses (p < 0.001), and dose tracking accessibility (p = 0.003) and quality (p = 0.002). Patients reported significantly higher satisfaction with PCTS for pain relief (p < 0.001), safety (p = 0.027), self-control (p < 0.001), and patient (p < 0.001) and nurse ease of use (p < 0.001); and higher satisfaction with IV-PCA for correct set-up and programming (p = 0.002). Overall satisfaction did not differ significantly among nurses, but among patients satisfaction with IV-PCA declined after considering PCTS (p < 0.001). Nurses placed greater importance on safety to their overall satisfaction than patients did.

LIMITATIONS:

Only respondents with Internet access were included. PCTS satisfaction is hypothetical and may not reflect true product satisfaction.

CONCLUSION:

PCTS is a novel delivery system for postoperative pain and has the potential to improve patient and nurse satisfaction over IV-PCA.

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