

Optimizing Patient Pain Control in the Post Anesthesia Care Unit by Initiating Epidural PCA Pumps in the Operating Room

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Introduction: Certain surgeries benefit from epidural Patient Controlled Analgesia (ePCAs). They should provide better postoperative pain control and decrease recovery time. Normally, medications are dosed through the epidural intraoperatively. The ePCA is set up by PACU and connected by anesthesia.

Identification of the problem: Starting an ePCA takes time. There can be delays with initiation. ePCAs often aren't ready upon arrival for multiple reasons. Further delays can be due to lack of anesthesia resident availability. Since PACU nurses cannot connect the pumps, if the PACU resident is occupied, the pumps aren't connected immediately.

QI question/Purpose of the study: ePCA initiation delays can increase patients' pain. If patients can come to the PACU with connected and infusing ePCAs, pain levels would be tolerable and easier to manage. This can reduce additional opioid usage and decrease their PACU time.

Methods: Anesthesia providers were educated on setting up the ePCA in the OR. Block nurses were instructed to send an ePCA into the OR with the patient. PACU nurses were educated on the new process, including performing ePCA handoff on the EMR with anesthesia during report.

Outcomes/Results: A one-month retroactive chart review was performed. Twenty-one percent of ePCA patients reported pain upon arrival with an average pain of 8/10. The elapsed time in PACU for ePCA initiation was 66 minutes.

Post-implementation, there was a 3-month chart review. Initially, 27 percent of patients reported pain upon arrival, with an average pain score of 9/10. By the last month, 15 percent reported pain with a pain score of 4/10.

Discussion: Initially, kinks needed fixing. Orders often needed to be adjusted, since anesthesia were accustomed to their own OR dosages. Some patients didn't arrive with connected ePCAs. There are few, if any, issues currently.

Conclusion: This is a beneficial system. Patients report reduced pain and immediate action can be taken if required, since ePCAs are already infusing. PACU nurse flow has improved, since the prior set-up time can be dedicated to patient care and documentation.

Implications for perianesthesia nurses and future research: Implications are promising. With an earlier ePCA initiation, there should be no increase in patient pain between the OR to the PACU, since medications are continuously infusing. This can significantly decrease patient opioid use, which is a nationwide crisis.