

# A Two-Pronged Approach to PONV Prevention

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Despite advances in prevention strategies, up to 30 percent of the general population still experiences nausea and vomiting after surgery. Reducing that number should be a priority for all of us. Preventing PONV boosts patient satisfaction, ensures faster recovery, and saves surgery facilities money. Fortunately, there is a simple formula for achieving this: Cut down the use of volatile anesthetics and post-op opioids, two agents that have been shown to cause PONV.

Instead of gas-based anesthesia, consider using total intravenous anesthesia (TIVA) with propofol as the primary sedative. Studies show that IV anesthesia cuts PONV by 20 to 30 percent, and that propofol, in particular, enables quick, smooth recovery. It also has anti-emetic properties. When patients are at high risk for PONV, consider using dexmedetomidine rather than remifentanyl as a TIVA adjunct, since it is a non-opioid sedative with some analgesic properties.

Instead of depending on post-op opioids for pain control, administer single-shot peripheral nerve blocks. When indicated, we use PNBs as the primary surgical analgesic, and we bill for them as such. The prolonged pain control that a successful block provides helps obviate the need for opioids.

This two-pronged approach costs slightly more up front than traditional gas-based anesthesia, and TIVA requires extra drug calculations and ongoing pump programming to ensure correct depth of anesthesia. But if it prevents even a few incidents of PONV, it's worth it. The most important reason is patient



A single episode of nausea and vomiting costs \$415, according to one study.

satisfaction; research shows that patients are willing to pay up to \$100 to avoid vomiting. But another very important reason is that PONV prevention can save facilities money. PONV adds cost to a case due to prolonged recovery, nursing interventions, the need for rescue drugs, and case delays due to a full PACU. In fact, one study showed that the cost associated with a single episode of nausea and vomiting in the surgicenter setting was \$415. Remember also that PONV is one of the primary reasons for unplanned admissions among same-day surgery patients.

PONV causes suffering and dread for patients, and it creates delays and additional costs for surgery facilities. It's in everyone's best interest to work to prevent it, by reducing or eliminating the agents that cause it.



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