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Continuum of care

Consensus guide on preventing PONV

If there's any side effect patients dread after surgery, it's nausea and vomiting. It's also the most common, occurring in about a third of patients. Practical, evidence-based advice on how to prevent the problem is available in a new evidence-based guideline from the American Society of PeriAnesthesia Nurses (ASPAN).

The guideline on postoperative nausea and vomiting (PONV) and postdischarge nausea and vomiting (PDNV) represents the consensus of a work group of nurses, anesthesia providers, pharmacists, and other experts and has been endorsed by the American Society of Anesthesiologists (ASA) and American Association of Nurse Anesthetists.

Recommendations are rated on the strength of the evidence, and algorithms are included that clinicians can take and apply. The guideline sorts out the evidence on use of antiemetics, anesthesia techniques, and complementary therapy.

The guide is designed to be user friendly. "You can print out the algorithms and post them in the units. You can make them into posters—however you can best get them into place," says the project director for the guideline, Vallire Hooper, RN, MSN, CPAN, FAAN.

She highlighted aspects of particular interest to OR managers.

Adopt a simple risk assessment tool

"One thing we are recommending is a strong preoperative assessment strategy," Hooper says. Steps include an assessment tool and good communication between nurses and anesthesia providers.

Good news—the simplified risk assessment tools are as effective as more complicated ones, the guideline states. Two simple tools are by Apfel and Koivuranta (sidebar). The Apfel tool, for example, asks about gender, smoking, and a history of PONV or motion sickness.

"Most of these the preadmission nurse are already asking," Hooper notes. Using a simplified tool relieves strain on nurses and patients because it avoids unnecessary questions.

Convey risk score to anesthesia

There should be a well defined way to communicate the risk score to the patient's anesthesia provider.

"It doesn't do any good for the nurse to assess the risk factors and give the patient a risk score if anesthesia doesn't look at it and base their approach on the risk score," Hooper says.

She suggests reviewing documentation tools to see how the risk score can best be conveyed.

"The PONV score needs to be added where anesthesia providers will be most likely to see it," she says. "Work with anesthesia to make sure you are putting it in the right spot."

A box could be added to the preoperative checklist next to the pain score or ASA score (American Society of Anes-thesiologists patient classification), for example.

"Or you could flag the chart with a sticker, in the same way charts are flagged for latex allergy or malignant hyperthermia," she says.

Brush up on preop fasting guidelines

Proper hydration helps avoid PONV/PDNV. The guideline encourages having healthy patients undergoing elective surgery drink clear fluids up to 2 hours before surgery, as recommended by ASA.

Too often, "patients are coming in dry," Hooper says. Supplemental IV fluids may be needed for high-risk patients.

"Most patients arrive at the facility at least 2 hours in advance of their surgery. If they need fluid volume, there's really no reason why they shouldn't be able to get this preoperatively," she says.

Score nausea before discharge

The guidelines advise assessing—and quantifying—postoperative nausea before discharge.

"If the patient is complaining of nausea, we recommend that you have them quantify the nausea on a scale of 1 to 10, similar to a pain scale," she advises. That's more accurate than simply recording, "patient complains of nausea," giving medication, then saying, "nausea is better."

Prevent nausea and vomiting at home

Though there's little evidence on how many patients have nausea and vomiting after going home, the best estimate is one-third. The guideline offers some basic advice. This includes assessing patients using the Apfel or Koivuranta tool, and if they're at high risk giving prophylactic antiemetics. Also recommended are educating patients on PDNV as part of outpatient discharge teaching and assessing for PDNV in any outpatient followup contact. ❖

Reference

ASPAN's evidence-based clinical practice guideline for the prevention and/or management of PONV/PDNV. *J Peri-anesth Nurs.* 2006;21:230-250.

Download the guideline at www.aspan.org.

Simplified tools for PONV risk

Apfel et al tool

Risk factors	Points
Female gender	1
Nonsmoker	1
History of PONV/motion sickness	1
Postoperative opioids	1
	Score = 0 . . . 4

Source: Apfel C C et al. Anesthesiology. *1999;91:693-700.*

Koivuranta et al tool

Risk factors	Points
Female gender	1
Nonsmoker	1
History of PONV	1
History of motion sickness	1
Duration of surgery >60 min	1
	Score = 0 . . . 5

Source: Koivuranta M et al. Anaesthesia. *1997;52:445-449.*

Risk factors related to risk

# of risk factors	Level of risk	% risk of PONV
0-1	Low	10-20
2	Moderate	40
3	Severe	60
5	Very severe	80+