TITLE

Prophylaxis and Treatment of Postoperative Nausea and Vomiting (PONV)

AUTHORS

Ruth M. Gibson MD, PhD., Elizabeth K. Prentice MBBS., Lynn Martin FRCPC., Kelly V. Mayson FRCPC.

AFFILIATION

Dept. of Anesthesia, Vancouver Hospital

INTRODUCTION

We performed a quality assurance review of the anesthetic management, during a 12-month period of all gynecological patients in the Vancouver Hospital who experienced early PONV, and compared this with current recommended guidelines (1)

METHODS

Ethics committee approval was obtained. 1380 gynecological patients were admitted to the PACU during this 12-month period, and a database identified 195 patients who experienced PONV in PACU. A retrospective chart review was performed tabulating the relevant data from the perioperative period.

The research questions were: which "risk category" for PONV did the patient fit into, was this recognized, documented, and was appropriate prophylaxis instigated. We looked at whether appropriate post-operative rescue therapy had been ordered. Statistics were descriptive in nature

RESULTS

23% of our patients were designated "moderate" risk category (39% chance of PONV), 55% designated "high" risk category (61% chance of PONV) and 22% designated "very high" risk category (79% chance of PONV).

The "risk category" was only documented in 9% of the charts and in only half of those patients was the appropriate prophylaxis given, according to the Consensus guidelines. In moderate risk patients 44% received at least one prophylactic antiemetic agent, while in high risk patients only 12% received a minimum of two antiemetics, and, in very high risk patients, a mere 2.3% received a minimum of three antiemetics. In total, only 17% of patients received appropriate prophylactic antiemetic treatment. Very few charts gave clear indication as to the order that rescue anti-emetics should be administered. As a result metoclopramide was given as the initial medication in 84% of patients. Unnecessarily high doses of dolasetron were used and 15% of patients received an inappropriate second dose in PACU.

DISCUSSION

Our review only assessed gynecological patients who developed PONV but it appears that optimal prophylactic management is not occurring in Vancouver Hospital. As a result, we have recommended clear pre-operative documentation of PONV risk. Flow-charts showing the Consensus guidelines have been posted in the OR and PACU. Changes have been made to the preprinted standard postoperative orders to reflect the Consensus guidelines.

REFERENCES

(1) Consensus guidelines for managing postoperative nausea and vomiting. Gan TJ, Apfel CC, Tramer MR et al Anesth Analg, 2003;97:62-71