

POSTER ABSTRACTS

11th Annual HMO Research Network Conference

April 4-6, 2005 Santa Fe, NM

TRIP
73

Dolasetron and Transdermal Scopolamine vs. Dolasetron for Prevention of Postoperative Nausea and Vomiting in Outpatients Undergoing Laparoscopic Surgery

Tricia Meyer, PharmD, MS, Charles Roberson, MD, Russell McAllister, MD,
Robert McKinney, MD, Stephanie Carl, MD, M. Hasan Rajab PhD., MPH

Introduction: Transdermal scopolamine has been reported to be effective in the prevention of postoperative nausea and vomiting (PONV) and may offer an advantage as a post discharge antiemetic for ambulatory surgical patients with its long duration of action and antimotion sickness properties. Combining this agent with a 5HT-3 receptor antagonist may provide improved outcomes for patients undergoing day surgery. The purpose of the study was to compare the effectiveness of transdermal scopolamine 1.5mg patch with dolasetron 12.5mg IV vs. Dolasetron 12.5mg IV alone when administered for routine prophylaxis for PONV.

Methods: 184 consenting outpatients undergoing elective laparoscopic surgery with general anesthesia were randomly assigned to one of two antiemetic prophylaxis groups. Group 1 received transdermal scopolamine patch 2 hours prior to surgery and Dolasetron 12.5 mg IV before the cessation of anesthesia. Group 2 received a placebo patch 2 hours prior to surgery and dolasetron 12.5mg IV before the cessation of anesthesia. A visual analog scale was used with a range of 0=no nausea to 10=worst possible nausea. Episodes of nausea and vomiting, nausea scores, time to first episode of emesis, time in PACU, total recovery time and the need for rescue antiemetics were recorded. The incidences of nausea and vomiting and nausea scores were followed during the recovery period and 24 hrs. after surgery.

Results: There were no significant differences in the baseline characteristics. The incidence of nausea and vomiting prior to discharge was less in Group I ($p=0.02$). PONV for the ride home was significantly less in Group I also ($p=0.02$). There were no differences in side effects. Patients' satisfaction scores with their nausea and vomiting treatment were similar in both groups.

Conclusion: The combination of transdermal scopolamine with dolasetron was effective and decreased the incidence of PONV prior to discharge as compared with dolasetron alone. This combination was also effective in relieving PONV for the patient's car ride home.