

The Prophylactic Effect of Haloperidol Plus Dexamethasone on Postoperative Nausea and Vomiting in Patients Receiving Laparoscopically Assisted Vaginal Hysterectomy.

曾劍英

Chu CC;Shieh JP;Tzeng JI;Chen JY;Lee Y;Ho ST;Wang JJ

摘要

Abstract

BACKGROUND: Haloperidol, a major tranquilizer, has been found to have a potent antiemetic effect on postoperative nausea and vomiting (PONV), but the prophylactic effect of haloperidol plus dexamethasone on PONV has not been evaluated. We evaluated the prophylactic effect of haloperidol plus dexamethasone to either given alone, placebo or droperidol on PONV in patients undergoing a laparoscopic-assisted vaginal hysterectomy.

METHODS: Four hundred adult women (n = 80 in each of five groups) scheduled for a laparoscopic-assisted vaginal hysterectomy were enrolled in a randomized, double-blind, placebo, and positive-control study. Fifteen minutes after the induction of anesthesia, patients received an IV injection of either saline (group S), droperidol 1.25 mg (group D), haloperidol 2 mg (group H), dexamethasone 5 mg (group Dx), or haloperidol 2 mg plus dexamethasone 5 mg (group H + Dx) to prevent PONV. The occurrence of PONV and medication-related side effects were recorded.

RESULTS: The incidences of PONV (0–24 h) in the D (36%), H (37%), Dx (38%), and H + Dx (19%) groups were significantly lower than in the S group (65%; $P < 0.05$ for each comparison). The H + Dx group had the lowest incidence of PONV (19%; $P < 0.05$ for each comparison) of the five study groups. No differences were found between the D, H, and Dx groups. Also, no differences were found among the five groups in the side effects of QT prolongation, intensity of postoperative pain, level of

sedation, and occurrence of extra-pyramidal symptoms.

CONCLUSION: Prophylactic haloperidol 2 mg plus dexamethasone 5 mg produced a greater reduction in the incidence of PONV than did either drug used alone, placebo or droperidol without increasing perioperative adverse outcomes.

Previous SectionNext Section**IMPLICATIONS:** Prophylactic haloperidol plus dexamethasone produced a greater reduction in the incidence of postoperative nausea and vomiting than did either drug used alone, droperidol or placebo, without increasing perioperative adverse outcomes. This combination can be considered for prophylactic treatment of postoperative nausea and vomiting.

Previous SectionNext SectionThe use of a combination of antiemetics with different mechanisms of action is an important option for the treatment of postoperative nausea and vomiting (PONV).^{1,2} Droperidol, a major tranquilizer with dopamine 2 (D2) receptor antagonist effect, has often been tested in combination with other antiemetics for treating PONV.^{1–3} However, in December 2001, the Federal Food and Drug Administration issued a “black-box” warning for droperidol due to its potential QT prolongation-related cardiac side effect.⁴ This announcement led to a marked reduction of droperidol use for PONV and a search for a substitute.

Haloperidol, a major tranquilizer with a D2-receptor antagonist effect, was considered a possible substitute for droperidol.^{5–10} Haloperidol has been used in palliative care as an antiemetic for nausea and vomiting.⁷ Recently, haloperidol was further found to have an effect on PONV.^{8–10} However, most of the previous reports studied haloperidol as a sole drug for PONV, and combinations of haloperidol with other potent antiemetics, e.g., dexamethasone, were rarely evaluated. In addition, the advantage of combining droperidol with dexamethasone for the prevention of PONV has been established.¹¹ It thus would be expected that haloperidol, when combined with dexamethasone, would similarly provide enhanced prophylaxis than haloperidol alone.

The aim of the present study was to evaluate the prophylactic effect of haloperidol plus dexamethasone on PONV. We hypothesized that prophylactic haloperidol plus dexamethasone will provide a greater reduction in the incidence of PONV than either drug used alone, placebo or droperidol.