

Effects of maropitant in cats receiving dexmedetomidine and morphine

Manuel Martin-Flores MV

Daniel M. Sakai MV

McKenzie M. Learn ASC

Alicia Mastrocco BA

Luis Campoy LV

Jordyn M. Boesch DVM

Robin D. Gleed BVSc, MA

From the Department of Clinical Sciences, College of Veterinary Medicine, Cornell University, Ithaca, NY 14853.

Address correspondence to Dr. Martin-Flores (martinflores@cornell.edu).

OBJECTIVE

To evaluate the effects of maropitant in cats receiving dexmedetomidine and morphine.

DESIGN

Randomized controlled trial.

ANIMALS

66 healthy female domestic shorthair cats.

PROCEDURES

Cats were randomly assigned to receive maropitant (1 mg/kg [0.45 mg/lb], SC; maropitant group; n = 32) or saline (0.9% NaCl) solution (0.1 mL/kg [0.045 mL/lb], SC; control group; 34) 20 hours before IM administration of dexmedetomidine (20 µg/kg [9.1 µg/lb]) and morphine (0.1 mg/kg). Following administration of dexmedetomidine and morphine, the incidences of emesis, retching, and signs of nausea (sialorrhea and lip licking) were compared between the 2 groups. The aversive behavioral response of each cat to injection of maropitant or saline solution was scored on a visual analogue scale by each of 4 observers who were unaware of the treatment administered.

RESULTS

Only 1 of 32 cats in the maropitant group vomited, whereas 20 of 34 control cats vomited. The incidences of emesis and retching for the maropitant group were significantly lower than those for the control group. The incidence of signs of nausea did not differ between the 2 groups. Visual analogue scale scores for the maropitant group were significantly higher than those for the control group.

CONCLUSIONS AND CLINICAL RELEVANCE

Results of the present study indicated that administration of maropitant to healthy cats approximately 20 hours prior to administration of dexmedetomidine and morphine significantly decreased the incidence of emesis but did not decrease the incidence of signs of nausea. However, maropitant appeared to cause substantial discomfort when injected SC. (*J Am Vet Med Assoc* 2016;248:1257–1261)

IQR Interquartile range
VAS Visual analogue scale