Comparison of neosaxitoxin versus bupivacaine via port infiltration for postoperative analgesia following laparoscopic cholecystectomy: A randomized, double-blind trial

Rodríguez-Navarro, Alberto J.

Berde, Charles B.

Wiedmaier, Gonzalo

Mercado, Andres

Garcia, Carlos

Iglesias, Veronica

Zurakowski, David

Background and Objectives: Wound infiltration with available local anesthetics generally provides analgesia for less than 8 hrs. The site 1 sodium-channel toxin neosaxitoxin (neoSTX) produced analgesia for over 24 hrs in animals and human volunteers. In this randomized, double-blind trial, we examined the postoperative course of patients undergoing laparoscopic cholecystectomy under a standardized general anesthesia with wound infiltration using either neoSTX or bupivacaine. We hypothesized that neoSTX would reduce pain compared with bupivacaine at 12 hrs postoperatively. Methods: Patients received preincisional infiltration of laparoscope entry sites with 20 mL containing either neoSTX (total dose, 100 ?g) or bupivacaine 0.25% (total dose, 50 mg). The primary outcome measure was the visual analog pain score at 12 hrs postoperatively. Secondary outcomes included repeated pain scores at rest and with movement, analgesic use, functional recovery, and adverse effects. Groups were compared