correspondence were used in other studies (75 mg/kg in one study3 and 40 mg/kg used in our study).

In Reply:
We thank Drs. Woehlck and El-Orbany for their interest in our recently published article that examined lipid emulsion in the setting of cardiac arrest induced by bupivacaine injection.4 Their letter raises several important issues. In the Discussion section of our article, we explained some of the major differences between the various animal models that have been used to evaluate lipid treatment for local anesthetic toxicity.

We recognize the potential drug interactions between the anesthetics agents and the experimental protocol. The anesthetic agents, such as xylazine, ketamine, and α-chloralose, were chosen to preserve hemodynamic and electrophysiologic stability at the doses used in our study. Propofol was avoided because of the confounding effect of lipid pretreatment, as found in other animal studies of this nature. Despite this limitation, we were able to achieve a stable hemodynamic profile in all animals before the induction of cardiac arrest with the bupivacaine injection. After examining the electrocardiographic data (mean ± SD), we did not observe any occurrences of prolonged PR (120.6 ± 13.7), QRS (59.1 ± 14.6), or QTc intervals (347.4 ± 26.4), during the baseline period before the induction of cardiac arrest.2 Our electrophysiologic data are perhaps different from the results mentioned in the letter of Woehlck and El-Orbany because much higher doses of α-chloralose were used in other studies (75 mg/kg in one study3 and 100 mg/kg in another4) in contrast to a moderate dose of 40 mg/kg used in our study.

We agree with Drs. Woehlck and El-Orbany that it would be useful to consider further experiments that expand our understanding of the potential therapeutic benefits of lipid emulsion in the setting of cardiac arrest induced by toxic doses of local anesthetic, especially at a time when various national and international organizations are in the process of developing recommendations incorporating lipid treatment.

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