CARDIOPROTECTIVE EFFECT OF PROPOFOL CANNOT BE EXTRAPOLATED FROM THE PLACEBO- CONTROLLED,

RANDOMIZED CONTROLLED TRIAL

To the Editor:

We eagerly read the article by Rogers and colleagues.¹ This is an important clinical study for anesthetic processes during cardiac surgery. However, we would like to emphasize and discuss some conflicting points.

First of all, propofol was suggested as cardioprotective. However there was no statistically significant difference between groups for myocardial troponin T concentration levels during the postoperative period. Without powerful statistical support it is difficult to recommend adding propofol to cardioplegia. We previously published a study² comparing the in vivo effects of isoflurane, sevoflurane, and propofol anesthesia on ischemia and reperfusion-mediated free radical injury and oxidative stress during coronary artery bypass grafting surgery and comparing the effects of these anesthetic agents on levels of the end products of lipid peroxidation and nitric oxide in human right atrial tissue and blood. In our study² we suggested that inhaled anesthetics such as isoflurane and sevoflurane better preserve cardiac function after cardiopulmonary bypass (CPB) from myocardial damage than propofol. Furthermore, propofol induced lower blood levels of lipid peroxidation than isoflurane and sevoflurane. Propofol also increased glutathione peroxidase activity but induced less nitric oxide production compared with sevoflurane. These findings support the cardioprotective properties demonstrated by patients' hemodynamic parameters.

Second, therapeutic hypothermia is a different strategy to decrease myocardial injury secondary to ischemia during cardiac surgery with CPB.² In the study by Rogers and colleagues¹ there is no information about hypothermia and the body temperature of the patient during the surgical procedure. This is also an important issue for cardioprotection.

Third, during the pre-CPB period all patients' anesthesia maintenance was supported with the volatile anesthetic agent isoflurane, which itself has cardioprotective effects. Isoflurane may have added to the cardioprotective effect observed with propofol. To observe the pure cardioprotective effect of propofol there should have been a group solely treated with propofol.

Another multicenter, randomized controlled study³ did not demonstrate any difference between sevoflurane anesthesia and propofol total intravenous anesthesia on the composite end point of prolonged intensive care unit stay, mortality, or both in patients undergoing cardiac surgery.

Finally, using a lipid solution for placebo may not be proper because the cardioprotective effects of lipid solutions have not been shown in humans. Existing studies in the literature about this are limited to animal models.

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PROPHYLACTIC AMIODARONE: USE IT OR NOT?

To the Editor:

Ad and colleagues¹ reported that prophylactic amiodarone can reduce atrial fibrillation (AF) recurrence.

The primary outcome occurred in 52% of the nonamiodarone group (23 of 44) and 19% of the amiodarone group (8 of 43; $P = .001$). Prophylactic use of amiodarone after surgical AF ablation has been debated for a long time, mostly because of its life-threatening adverse effects. As intensivists, we do want to know whether prophylactic amiodarone use is associated with better long-term outcomes for our patients.

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