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Autor(en) des Beitrags: Baumgartner, CM; Koenighaus, H; Ebner, JK; Henke, J; Schuster, T; Erhardt, WD

Titel des Beitrags: Cardiovascular effects of dipyrone and propofol on hemodynamic function in rabbits.

Abstract: OBJECTIVE: To evaluate the short-term cardiovascular effects of IV administration of dipyrone (metamizole) as an intraoperative analgesic during total IV anesthesia with propofol. ANIMALS: 6 healthy female New Zealand White rabbits. PROCEDURES: Anesthesia was induced with propofol (4.0 to 8.0 mg/kg, IV) and maintained with the same drug (1.2 to 1.3 mg/kg/min, IV). After induction, 3 doses of dipyrone (65 mg/kg each) were administered IV at 25-minute intervals. Before and for 10 minutes after each dipyrone injection, the following vascular and hemodynamic variables were recorded at the left common carotid artery every minute after the first injection: vessel diameter; peak systolic, minimum diastolic, end-diastolic, and mean blood flow velocities; mean volumetric flow; resistance and pulsatility indices; mean arterial blood pressure (MAP); heart rate; arterial oxygen saturation (SpO(2)); and end-tidal partial pressure of CO(2) (PETCO(2)). Echocardiography was performed after the second injection. The same variables were measured at the abdominal aorta (AA) after the third injection. RESULTS: Dipyrone injections caused a significant, transient decrease in the resistance index at the AA. Also detected were a minor decrease in pulsatility index at the left common carotid artery and a minor increase in end-diastolic blood flow velocity at the AA. The MAP,
heart rate, SpO(2), and PETCO(2) did not significantly change after injections. A comparison of HR and MAP after the first and third bolus injections revealed only minor changes. CONCLUSIONS AND CLINICAL RELEVANCE: Dipyrone used with propofol anesthesia in rabbits appeared not to significantly impair cardiovascular and hemodynamic function.