Short communication

Hemodynamic effect of propofol in enalapril-treated hypertensive patients during induction of general anesthesia

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Abstract:
Angiotensin converting enzyme inhibitor (ACE-I) treated hypertensive patients are well known to be at risk during general anesthesia, because of hypotension that can occur. We compared hemodynamic changes in these patients during induction of general anesthesia with propofol and etomidate – two intravenous anesthetics. Hypotension after propofol that we observed in ACE-I group versus normotension after etomidate (p < 0.001) in our opinion may be the result of additive effect of similar endothelium-dependent mechanism of action of propofol and ACE-I, i.e. increase in production and release of nitric oxide (NO). This very unique observation, however, needs further investigation to precisely define the mechanism of our finding.

Key words:
angiotensin converting enzyme inhibitor, anesthesia induction, hemodynamics, propofol