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A randomized double-blind study was conducted in 60 ASA class 1, 2 patients to determine the effectiveness of alfentanil 20 mg/kg in blunting the hemodynamic responses to tracheal intubation in Thai patients. Patients were premedicated with 7.5 mg. dormicum about 1 hr before induction and were allocated randomly to receive alfentanil 20 mg/kg or normal saline, given intravenously 30 seconds before induction of anesthesia. One minute after administration of thiopental 4.0 mg/kg and succinylcholine 1.5 mg/kg intravenously, tracheal intubation was performed using direct laryngoscopy. In response to intubation, increases in heart rate and systolic blood pressure (SBP) occurred in both groups but these changes were significantly higher in control group than alfentanil group (P=0.00). However, in alfentanil group, there was a transient decrease in SBP to less than 30% baseline value in three of thirty patients (10%) after induction of anesthesia. But SBP was still greater than 80 mmHg and did not require any treatment. In conclusion 20 mg/kg of alfentanil administered 30 seconds before induction is effective for blunting the hemodynamic responses to tracheal intubation. We recommended this as an alternative technique for healthy adult Thai patients.

Key words : Alfentanil, hemodynamic responses, tracheal intubation.