ABSTRACT

Objective: To observe whether the co-induction technique affects the total induction dose requirement of propofol and thereby reduce associated hemodynamic adverse effects.

Method: After getting the approval from the Ethic Committee of USU Medical School and Haji Adam Malik General Hospital, Double blinded, a randomized clinical trial on 54 patients, 20 to 50 years, physical state ASA-1 who underwent elective surgery with general anesthesia and induction with propofol in Haji Adam Malik General Hospital. The sample were divided into two groups each with 27 subjects. Group A received Ketamine 0.3 mg/kgBW IV as co-induction agent one minute before the induction propofol and group B received Midazolam 0.03 mg/kgBW IV as co-induction agent three minutes before the induction propofol. All patients received premedication Fentanyl 2 mcg/kgBW IV four minutes before induction. The records doses of propofol induction using loss of eye-lids reflex. This study also observed the hemodynamic response after premedication, after administration of Ketamine or Midazolam and after loss of eye-lids reflex. An incidence of any side effects were also recorded.

Result: The study reveals that the total induction doses of propofol are 1.38 mg/kgBW (group A) and 1.63 mg/kgBW (group B). There were no hemodynamic differences between two groups, but there was hemodynamic decreased that is statistically significant difference between groups after induction. There were no hypotensive effect that being found which is characterized by hemodynamic decreased > 20% of initial value.

Conclusion: There were significant statistical differences between the two groups in reducing propofol induction doses. Propofol induction doses was less at ketamin group.

Keywords: Co-induction, Ketamine, Midazolam