

Research on the Clinical Efficacy of Colloid combined with Methoxamine Preload in the prevention of hypotension after the Induction of General Anesthesia

Abstract:

Objective : To assess the Clinical Efficacy of Colloid combined with Methoxamine Preload in the prevention of hypotension after the Induction of General Anesthesia.

Methods: 200 ASA I - II non-cardiac surgery patients aged 18-65 were involved in this investigation. They were randomly divided into 2 groups: group Methoxamine (A) and group control (B). Each patient received HES 130/0.4 Injection (6ml/kg) before induction of anesthesia. In group A, patients received Methoxamine, whereas in group B, patients received the same amount of physiological saline. Monitor and record systolic blood pressure (SBP), diastolic blood pressure (DBP), mean arterial pressure (MAP), heart rate (HR) and BIS value before induction, immediately after induction and 1,2,3,4,5,6,7,8,9,10mins after induction respectively. Compare the Hemodynamic stability and the incidence of hypotension, hypertension and bradycardia during the induction period of the two groups.

Results: The changes of SBP/DBP/MAP of group A are more stable than those of group B during the period of induction ($P < 0.05$), but the HR of group A 3mins after the induction has a larger decline than group B ($P < 0.05$). The incidence of hypotension of group A and group B is 13% and 61% respectively, with the remarkable difference in statistical significance ($P < 0.05$). There were no statistical significance between the two groups regarding their incidence of hypertension and bradycardia ($P > 0.05$).

Conclusions: Colloid preload combined with methoxamine preload can prevent the hypotension after the induction of general anesthesia and make the hemodynamic changes more stable.

Key words: induction of General Anesthesia, Colloid, methoxamine, hypotension