

Effect of Gabapentin on Pressor Response to Laryngoscopy and Tracheal Intubation: A Double Blind Randomized Placebo Controlled Study

Geeta Bhandari, *K.S. Shahi

Department of Anaesthesiology, *Surgery, Government Medical College, Haldwani - 263139 (Uttarakhand)

Abstract:

The effects of gabapentin on arterial pressure and heart rate were compared at induction of anaesthesia and at tracheal intubation in a prospective randomized double blind study. Forty patients of American society of Anaesthesiologists (ASA) physical status I undergoing elective surgery were divided in two groups of twenty each. Twenty patients received oral placebo (Group P), and 20 patients received 900 mg of gabapentin (Group G), 2 hours prior to induction of anaesthesia. Systolic blood pressure (SBP), Diastolic blood pressure (DBP) and Heart rate (HR) were recorded one minute before and after induction of anaesthesia, immediately after intubation and 1,3,5 and 10minutes after intubation. Changes in SBP were statistically insignificant in both the groups. In the gabapentin group, at 0 and 5 minutes, the DBP was significantly less than the placebo group ($p < 0.05$). There was a significant decrease in heart rate in Group G as compared to Group P ($p < 0.05$). Pre medication with 900 mg gabapentin, 2 hours before induction of anaesthesia attenuates the tachycardia associated with laryngoscopy and intubation but not the pressor response completely.