

A Comparative Study of Etomidate and Propofol as Induction Agent for Intubation in Patients coming to Emergency Medicine Department

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ABSTRACT

Background & Aims: An ideal induction agent for intubation in the emergency department should have hemodynamic stability, minimal respiratory side effects and rapid clearance. Etomidate and Propofol are popular rapid-acting inducing agents; our aim is to compare hemodynamic changes and adverse effects occurring between them when used as induction agents in the emergency department. **Material and Methods:** A study sample of 200 patients who required intubation in the emergency department were enrolled after satisfying the inclusion and exclusion criteria and were divided into two equal groups. After assessing the primary survey of airway, baseline hemodynamic parameters, Group A was given Inj. Etomidate 0.3–0.5 mg/kg iv and Group B was given Inj. Propofol 0.5–1.5 mg/kg iv as an induction agent, followed by that Heart rate (HR), systolic blood pressure (SBP), diastolic blood pressure (DBP), mean arterial pressure (MAP), respiratory rate (RR), oxygen saturation, myoclonus, nausea, and vomiting were monitored after induction and intubation at one, five and fifteen minutes. **Result:** The mean changes in HR, SBP, DBP, and MAP of groups A and B were compared, there was significant reduction in all three parameters in Propofol compared to Etomidate. In group A, out of 100 patients, 25 had myoclonus, 15 had vomiting, and no side effect was observed in the other 60 patients. In group B, out of 100 patients, 22 had apnea, 14 had vomiting, and no side effect was observed in the remaining 64 patients. **Conclusion:** This study concludes that Etomidate is a better agent for induction than Propofol in view of hemodynamic stability. The incidence of apnea was higher with Propofol, and myoclonus more with Etomidate.

Keywords: -Etomidate, Propofol, Intubation