

## ABSTRACT

### BACKGROUND:

The aim of the study is to compare the hemodynamics and various other effects of Propofol and Etomidate in adults undergoing surgeries under general anesthesia.

### METHODS:

60 patients were enrolled in the study who underwent elective surgeries under general anesthesia and had been assessed individually both intra-operatively and post-operatively. Induction with calculated dose of Propofol or Etomidate. Pain on injection and myoclonic movements at induction, if occurred were recorded. The heart rate and mean arterial pressure were monitored continuously and recorded before induction, at induction and laryngoscopy followed by 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup> and 10<sup>th</sup> minutes after intubation. Episodes of apnoea noted. The obtained results were sent for statistical analysis.

### RESULTS:

It was observed that Propofol (Group 1) caused significant hypotension and tachycardia at induction in comparison to Etomidate. In various studies, Etomidate has showed less cardiovascular depression and minimized the use of vasopressor agents than other induction agents in sepsis and critically ill patients.

### CONCLUSIONS:

In conclusion, Etomidate was found ideal for its hemodynamic stability when compared to Propofol along with less incidence of pain on injection, the only drawback being high incidence of myoclonus.

The study suggests that Etomidate is a better option in patients particularly vulnerable to hemodynamic fluctuation during induction like uncontrolled hypertension, sepsis, critically ill and patients with coronary artery disease.