

COMPARISON OF HEMODYNAMIC PARAMETERS AND PATIENT AWARENESS WHEN USING THIOPENTONE VERSUS PROPOFOL DURING & AFTER INDUCTION OF ANAESTHESIA IN A TERTIARY CARE HOSPITAL.



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ABSTRACT

Anesthetic drugs used in various surgical procedures will result in alteration of the hemodynamic parameters and changes in the patient awareness levels. In this study, we found that induction by Propofol showed decreased Hemodynamics (Hypotension) when compared to the patients induced with Thiopental Sodium. By using Brice questionnaire we found that the postoperative objectives such as hearing voice, feeling mask on face, feeling pain, dreaming, recovery, anxiety were significantly low in patients using Propofol when compared to Thiopental Sodium. The postoperative awareness was significantly low in Propofol induced patients than Thiopental sodium induced patients. Thus patients induced with Propofol showed good anesthetic phase with less side effects compared to Thiopental Sodium.

AIM AND OBJECTIVES

To Compare Hemodynamic Parameters And Patient Awareness When Using Thiopentone Versus Propofol During and after Induction Of Anesthesia In A Tertiary Care Hospital.

METHODOLOGY

Study Design: A Prospective Observational single blind study.

Study Duration: 4months (November 2018-February2019).

Sample size: A clinical study of 150 cases as per criteria of American Society of Anaesthesiology 1 (ASA1) & American Society of Anaesthesiology2 (ASA2) are selected between age groups 18 - 60 years both men and women undergoing different surgical procedures under general anesthesia.

Study Department and Site: Department of Anaesthesiology, Tertiary care hospital, Guntur, Guntur district, Andhra Pradesh, India.

Inclusion Criteria: As per American Society of Anaesthesiology 1 (ASA1) & American Society of Anaesthesiology 2 (ASA2).

- Patients aged between 18 – 60years both men and women are included.
- Patients/patient care giver who gave informed consent.
- Surgeries done under General anaesthesia are included.

Exclusion Criteria: Patients weight > 95 kgs are excluded. Age > 60 years both men and women are excluded.

- As per American Society of Anaesthesiology 3(ASA3) & American Society of Anaesthesiology 4 (ASA4), Patients on anti-depressant, alpha 2 adrenergic agonists & cytochrome p450 are excluded.
- Patients with raised temperature are excluded.

RESULTS AND DISCUSSION

In our study, a statistically significant decrease in systolic and diastolic blood pressure and mean arterial pressure was observed during and after induction of Propofol.

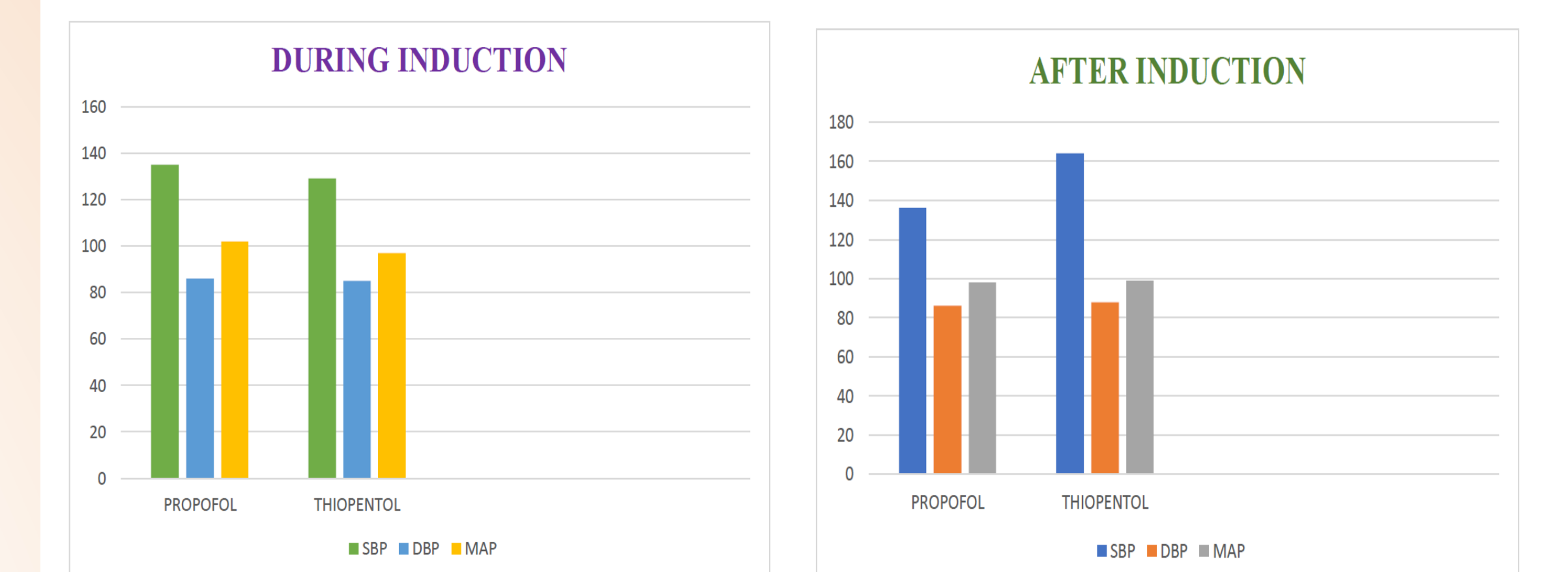
Considerable increase in systolic blood pressure, diastolic blood pressure and mean arterial pressure was observed during and after induction of Thiopental Sodium.

Thiopental Sodium is an ultra-short acting barbiturate general anesthetic that is an analogue of Thiobarbital. In our study we noticed that use of thiopental sodium accompanied with increase in systolic, diastolic, mean arterial blood pressure.

When compared the hemodynamic parameters both Propofol and Thiopental Sodium showed hemodynamic instability.

Apart from this when the awareness was checked, only 75% patients induced with Propofol complained postoperative pain while, 96% patients induced with Thiopentone complained pain.

50% of patients seemed to have tough recovery with Propofol, while 86% with Thiopentone. 30% of patients induced with Thiopentone claimed that they were dreaming during the procedure while no patient was dreaming with Propofol.



CONCLUSION

Our study concludes that Propofol showed decreased hemodynamics when compared to the patients induced with Thiopental Sodium i.e Thiopental Sodium showed increased hemodynamics. Hemodynamic stability varied in both the drugs as Propofol showed hypotension and Thiopental Sodium showed hypertension and the postoperative awareness was significantly low in Propofol induced patients than Thiopental sodium induced patients i.e; the patients induced with Propofol showed good anesthetic phase with less side effects compared to Thiopental Sodium.

REFERENCES

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