

Manipal Academy of Higher Education

**Impressions@MAHE**

---

Kasturba Medical College, Mangalore Theses  
and Dissertations

MAHE Student Work

---

Summer 10-30-2021

## **Comparison of efficacy of two different bolus doses of norepinephrine as prophylac-tic to prevent post-spinal hypotension during elective caesarean section**

PRANATHI GARAPATI

Follow this and additional works at: <https://impressions.manipal.edu/kmcmnr>



Part of the [Medicine and Health Sciences Commons](#)

---

## TITLE PAGE

1. **Type of manuscript : Clinical investigation**
2. **Title : Comparison of efficacy of two different bolus doses of norepinephrine as prophylactic to prevent post-spinal hypotension during elective caesarean section**

3. **Author information :**

a) Dr.PRANATHI GARAPATI M.B.B.S.

Junior Resident,Department of Anaesthesiology

Kasturba Medical College, Mangaluru.

Manipal Academy of Higher Education, Manipal

Ph no. 9666740160, email ID: [pranathi.garapati@gmail.com](mailto:pranathi.garapati@gmail.com)

b) Dr. MADHUSUDAN UPADYA

Professor,Department of Anaesthesiology

Kasturba Medical College, Mangaluru,

Manipal Academy of Higher Education, Manipal.

Phno. 9845225340, email ID : [madhusudan.upadya@gmail.com](mailto:madhusudan.upadya@gmail.com)

3. **Running title : Efficacy of bolus dose of norepinephrine in preventing post spinal hypotension**

4. **Corresponding author :**

Dr. MADHUSUDAN UPADYA M.D,

Professor, Department Of Anesthesiology,

Kasturba Medical College, Mangaluru,

Manipal Academy of Higher Education, Manipal,

Phone number: +91-9845225340/ Email : [madhusudan.upadya@gmail.com](mailto:madhusudan.upadya@gmail.com)

**Previous presentation in conferences :** Not applicable

**5. Conflicts of interest :** No potential conflict of interest relevant to this article

**6. IRB number :** KMC MLR 08-19/343

**7. Clinical trial registration number:** CTRI/2020/04/024801

## MANUSCRIPT

1. **Title :** Comparison of efficacy of two different bolus doses of norepinephrine as prophylactic to prevent post-spinal hypotension during elective caesarean section
2. **Running title :** Efficacy of bolus dose of norepinephrine in preventing post spinal hypotension

### 3. Abstract

**Background and aims :** During caesarean section spinal anaesthesia causes central neuraxial blockade which decreases sympathetic tone and SVR resulting in hypotension. Norepinephrine, a potent vasopressor can be used to prevent hypotension. In this study we compared two different bolus doses of norepinephrine to control post spinal hypotension. **Method :** It is an interventional study including 80 participants aged 18 years & above with ASA 2 physical status undergoing elective caesarean section under spinal anaesthesia. Participants were divided into 2 groups .Patients in group A received a bolus dose of 0.1µg/kg norepinephrine bolus while those in group B received 0.15µg/kg norepinephrine. The outcomes variables that were measured were blood pressure, heart rate and Apgar scores. Numerical data were stated in the form of mean ± standard deviation and analysed using t-test & chi square test. P value less than 0.05 was considered significant. **Results :** The mean change in Blood pressure after 3 mins was  $113.25 \pm 15.825$  in group A and  $114.93 \pm 13.660$  in group B and p value was found 0.614 which was not significant. Mean dose of norepinephrine administered in Group A is  $6.1575 \pm .89525$  and group B is  $9.3063 \pm 1.36373$  & P values using t test was 0.000 (highly significant). **Conclusion :** Lower doses ( 0.1µg/kg) of norepinephrine are equally effective to higher doses (0.15µg/kg) in preventing post spinal hypotension without the incidence of reactive hypertension

**Key words :** Caesarean section, spinal anaesthesia, hypotension, vasopressor, norepinephrine, Apgar score.