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بالرسالة صفحات
لم ترد بالأصل

Comparative Study of Norepinephrine and Ephedrine for Prophylaxis against Hypotension during Spinal Anesthesia for Cesarean Section

Thesis

Submitted for Partial Fulfillment of
Master Degree in ***Anesthesiology***

By

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Mohammed Ibrahim Elsayed Shahin

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List of Abbreviations

Abb.	Full term
ASA	*American Society of Anesthesia*
ASRA	*American Society of Regional Anesthesia & Pain Medicine*
bpm	*Beat per minute*
BUN	*Blood urea nitrogen*
CC	*Closing capacity*
CNS	*Central nervous system*
CO	*Cardiac output*
Cr	*Creatinine*
CS	*Cesarean section*
CSF	*Cerebro spinal fluid*
dl	*Deciliter*
FDA	*Food & Drug Administration*
FRC	*Functional residual capacity*
G	*Gauge*
g	*Gram*
GDFT	*Goal Directed Fluid Therapy*
HR	*Heart rate*
Hr	*Hour*
i.v.	*Intravenous*
IQR	*Interquartile range*
Kg	*Kilogram*
LA	*Local Anesthetic*
LAST	*Local Anesthetic systemic toxicity*
MAC	*Minimal alveolar concentration*
MAOI	*Mono amine oxidase inhibitor*
MBP	*Mean blood pressure*
mg	*Milligram*
Min	*Minute*
Ml	*Milliliter*
NE	*Norepinephrine*
PDPH	*Post Dural Puncture Headache*
PE	*Phenylephrine*

List of Abbreviations cont...

Abb.	Full term
PIH	*Pregnancy induced hypertension*
RA	*Regional anesthesia*
SA	*Spinal anesthesia*
SBP	*Systolic blood pressure*
SD	*Standard deviation*
SHSP	*Supine Hypotension Syndrome of Pregnancy*
SVR	*Systemic vascular resistance*
UA-PI	*Umbilical artery pulsatility index*
UtA-PI	*Uterine artery pulsatility index*
VR	*Venous return*
μg	*Microgram*

INTRODUCTION

Spinal anesthesia is the preferred method for elective cesarean sections due to considerable risks regarding airway management associated with physiological changes of pregnancy ***(Macarthur and Riley, 2007).***

Cesarean sections normally require an anesthetic block at T4 level, so hypotension is reported in up to 80% of spinal anesthesia cases ***(Hoyme et al., 2015).***

When maternal hypotension associated with spinal anesthesia for cesarean section is severe and sustained, it can lead to serious maternal complications as well as impairment of the uterine and placental blood flow with consecutive fetal hypoxia, acidosis, and neurological injury ***(Cyna et al., 2006).***

Many approaches have been investigated to prevent spinal hypotension, e.g., fluid loading, vasopressors, or both. Intravenous fluid protocols have been investigated in many trials to prevent spinal hypotension, but the clinical results were not satisfactory. With this in mind, investigators have turned their attention to vasopressor protocols to prevent spinal hypotension ***(Hasanin et al., 2017).***

Conventionally, ephedrine was regarded as the first-choice drug to maintain maternal blood pressure. Its sympathomimetic stimulant activity on α- and β-adrenergic receptors causes positive inotropic and chronotropic effects on