Faculty of Medicine
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Efficacy of two different doses and times of administration of midazolam prior to cesarean section with spinal anesthesia on the mother and neonate

M.D. Thesis

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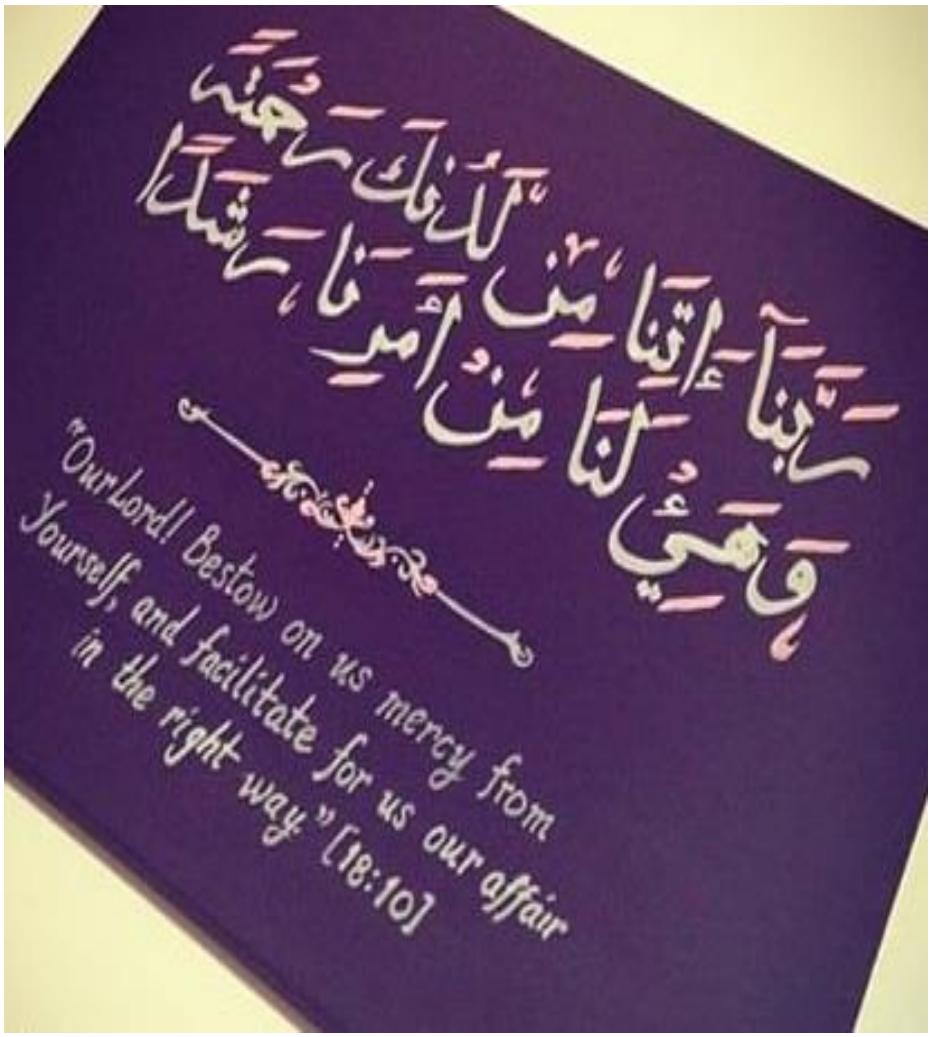

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List of Abbreviations

Abbr.	Title
APAIS	Amsterdam Preoperative Anxiety and Information Scale
APTT	Activated Partial Thromboplastin Time
ASA	American Society of Anesthesiologists
BMI	Body Mass Index
Bpm	Beat Per Minute
CBC	Complete Blood Count
Cl−	Chloride Anions
CS	Cesarean Section
DSST	Digital Symbol Substitution Test
GABA	Gamma-Aminobutyric Acid
GABAAR	GABA-A Receptor
Hb	Hemoglobin
HCT	Hematocrit
HR	Heart Rate
ICU	Intensive Care Unit
INR	International Normalized Ratio

IV ..... Intravenous

KFT ..... Kidney Function Test

LFT ..... Liver Function Test

MBP ..... Mean Blood Pressure

NACS ..... Neurologic and Adaptive Capacity Score

OAA/S Scale ..... Observer's Assessment of Alertness/Sedation Scale

OFR..... O_2 flow requirement

$PaCO_2$ ..... Arterial Partial Pressure of Carbon Dioxide

Plt ..... Platelets

Pr ..... Pressure

PRST ..... Pressure, Rate, Sweat, Tearing

PT ..... Prothrombin Time

RBS ..... Random Blood Sugar

RR..... Respiratory Rate

SD..... Standard Deviation

SPSS ..... Statistical Program for Social Science

UABG ..... Umbilical Cord Artery Blood Gases

VAS ..... Visual Analog Scale

WBCs ..... White Blood Cells

Wt ..... Weight

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1. Introduction

Like all surgical patients, obstetric patients feel operative stress and anxiety. Stress intensity is influenced by numerous factors such as previous pain experiences, education, culture, expectations, anxiety, environmental factors, and support from care givers ***(Carroll et al., 2012).***

Stress response leads to release of catecholamine and other vasopressors. At full term, uterine vasculature is maximally dilated but still responds to these vasopressors causing uterine vasoconstriction and decrease the uterine and placental blood flow which adversely affect the neonates ***(Baibazarova et al., 2013)***. So, it is so much important for mother and neonate trying to prevent such stress.

This can be prevented by giving patients detailed information about their operation and with preoperative pharmacological medications ***(Carr et al., 2006).*** However, because of the supposed depressive effects of sedatives on newborns, pharmacological medications have been long omitted in obstetric patients ***(Hawkins, 2010)***.

Midazolam is a water soluble and fast acting benzodiazepine agent with short recovery time. It is a highly

efficient preoperative sedative and anxiolytic with antegrade amnesia properties ***(Olkkola & Ahonen, 2008).***

The literature contains few studies concerning the use of midazolam in cesarean section (C/S) patients, as regard efficacy and safety on mother and neonate ***(Heizmann et al., 2012).***

2. Aim of the work

The aim of this work is to determine the efficacy and safety of midazolam premedication in two different doses and times of administration before delivery on maternal anxiety and short-term outcome of neonates after cesarean section with spinal anesthesia.

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