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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

Carbetocin versus Oxytocin in Caesarean Delivery: Influence on Perioperative Nausea, Vomiting and Hemodynamic Changes

Thesis

Submitted for Partial Fulfillment of Master Degree in Anesthesia

By

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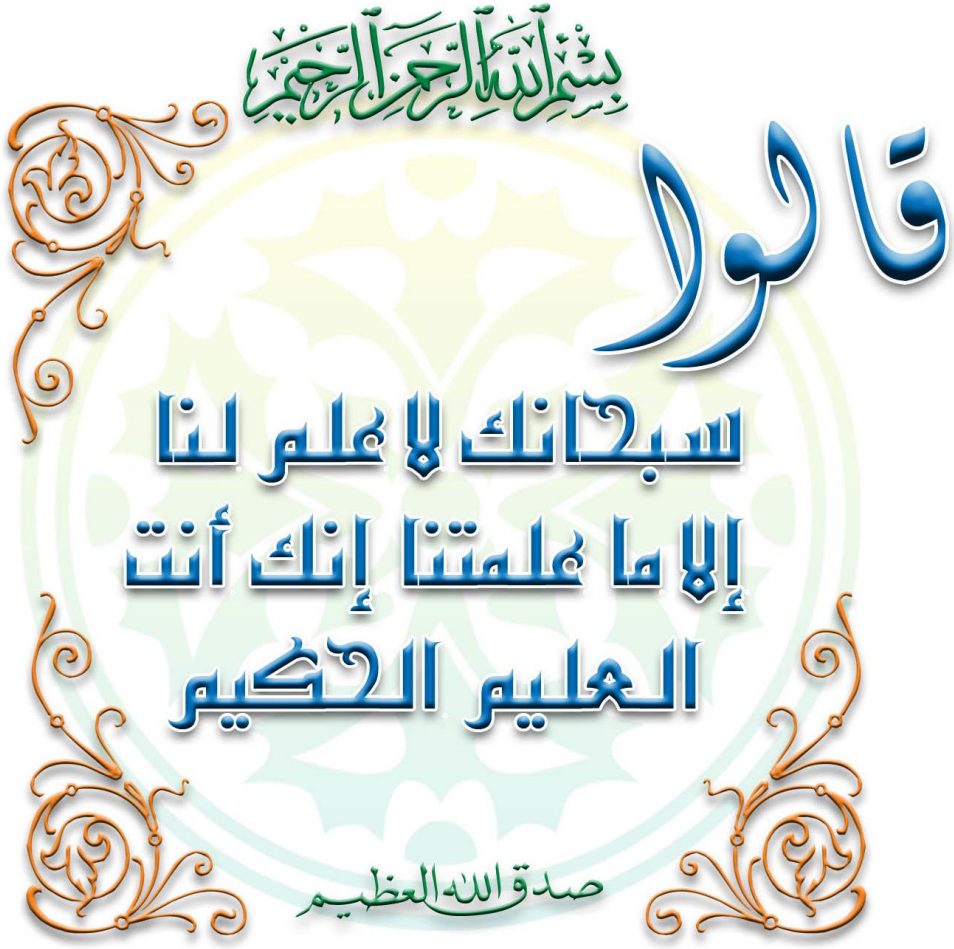
2020



سورة البقرة الآية: ٣٢

Acknowledgment

First and foremost, I feel always indebted to ALLAH, the Most Kind and Most Merciful.

I'd like to express my respectful thanks and profound gratitude to Prof. Dr. Gamal Fouad S. Zaki, Professor of Anesthesia, Intensive Care and Pain Management, Faculty of Medicine- Ain Shams University for his keen guidance, kind supervision, valuable advice and continuous encouragement, which made possible the completion of this work.

I am also delighted to express my deepest gratitude and thanks to Dr. Mona Refaat Hosny, Assistant Professor of Anesthesia, Intensive Care and Pain Management, Faculty of Medicine, Ain Shams University, for her kind care, continuous supervision, valuable instructions, constant help and great assistance throughout this work.

I am deeply thankful to Dr. Ibrahim Mohammed El Sayed Ahmed, Lecturer of Anesthesia, Intensive Care and Pain Management, Faculty of Medicine, Ain Shams University, for his great help, active participation and guidance.

I would like to express my hearty thanks to all my family for their support till this work was completed.

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List of Abbreviations

Abb.	Full term

µg .....Microgram
5HT3.....5-hydroxytryptamine
AMTSL .....Active management of third stage of labor
ASA .....American Standards Association
BMI .....Body mass index
CMV .....Cytomegalovirus
CNS.....Central nervous system
COPD .....Chronic obstructive pulmonary disease
C.S .....Ceserean section
CTZ .....Chemoreceptor trigger zone
D2.....Dopamine
ECG .....Electrocardiography
FFP.....Fresh frozen plasma
FRC .....Functional residual capacity
G.A .....General anesthetia
GFR .....Glomerular filtration rate
GI .....Gastrointestinal
HCG .....Human chorionic gonadotropin
HG.....Hyperemesis gravidarum
hPL .....Human placental lactogen
HR .....Heart rate
I.V. .....Intravenous
IU.....International unit
IVC .....Inferior vena cava
LES .....Lower esophageal sphincter
ML.....Milliliter
MLCK .....Myosin light chain kinase
mmHg.....Millimeters of mercury
NIBP .....Non-invasive blood pressure

List of Abbreviations (Cont…)

Abb.	Full term

NSAID**.....*****Nonsteroidal anti-inflammatory drug***
PACU**.....*****Post-Anesthesia Care Unit***
PH **.....*****Ptential of hydrogen***
PMI **.....*****Point of maximal intensity***
PPH**.....*****Post partum heamorhage***
S.A **.....*****Spinal anasthesia***
SpO_2 **.....*****Pulse oximetry***
T3 **.....*****Triiodothyronine***
T4 **.....*****Thyroxin***
TBG **.....*****Thyroid-binding globulin***
TRALI **.....*****Transfusion-related acute lung injury***

INTRODUCTION

Caesarean delivery has a lot of complications like hemodynamic changes, nausea and vomiting and some scenarios are life threatening complications as post-partum hemorrhage (PPH). The prevalence of PPH is approximately 6% of all deliveries ***(Carroli et al., 2008).***

In high-resource countries, PPH is the main cause of acute severe maternal morbidity, and of pregnancy-related ICU admissions. In addition to the direct consequences of acute hypovolemia, PPH exposes the women to the complications of transfusion, of intensive care and to infertility in case of hysterectomy. The main risk factors for PPH are factors of uterine atony, but they are globally poorly predictive. Risk factors related to components of care during labor and delivery are amenable to change, and the assessment of their risks-benefits balance should take into account the associated risk of PPH ***(Deneux-Tharaux et al., 2014).***

The third stage of labor has traditionally been defined as the time between the birth of the baby and the delivery of the

placenta and membranes. It is the third stage that is the most perilous for the woman because of the risk of postpartum hemorrhage (PPH). The third stage of labor typically lasts between 10 and 30 minutes; if the placenta fails to separate within 30 minutes after childbirth, the third stage is considered to be prolonged. If the third stage of labor lasts longer that 18 minutes, it is associated with a significant risk of PPH; and there is a six-fold increase in PPH when the third stage of labor lasts longer than 30 minutes ***(Güngördük, 2018).***

The most frequent cause of PPH is uterine atony; therefore, active management of the third stage of labour rather than expectant management is recommended ***(Chong et al., 2004).***

Intravenous infusion of 10 IU of oxytocin is recommended as the prophylactic medication of choice to reduce the incidence and severity of PPH ***(Cotter et al., 2001).***

Oxytocin has a short half-life, whereas carbetocin, an oxytocin derivative exerting its effect via the same molecular mechanisms as oxytocin, has a longer half-life, and has been reported to decrease the use of additional oxytocics. Currently 100 µg of carbetocin is routinely used for the prevention of PPH ***(Sweeney et al., 1990).***

The hemodynamic effects of an oxytocin bolus consist of systemic vasodilatation, with hypotension, tachycardia, and an