MAKERERE  **UNIVERSTIY**

EFFECT OF 0.25MG/KG INTRAVENOUS KETAMINE DURING SPINAL ANAESTHESIA ON POST CAESAREAN ANALGESIC REQUIREMENT IN ELECTIVE CAESAREAN SECTIONS

IN MULAGO

BY

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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILMENT OF THE AWARD OF MASTERS IN MEDICINE OF ANAESTHESIOLOGY AND CRITICAL CARE

OF MAKERERE UNIVERSITY

JULY 2014

DECLARATION

I, Richard Mwase, hereby declare that the work described here was done by me and any assistance from others has been appropriately acknowledged.

The work presented in this dissertation has not been presented for any other degree in any university The opinions expressed herein are mine unless otherwise stated, and where such has been the case, reference has been made.

Signed……..Date ……../……./……..

This dissertation has been submitted for examination with approval of the following supervisors:

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DEDICATION

This book is dedicated to all perioperative care providers in Uganda who continue to work despite the odds that they face in the delivery of this noble service.

ACKNOWLEDGMENTS

My gratitude goes to my mother, Evelyn, for the love, patience; encouragement and support which enabled me go through this masters program.

Praise goes to the Lord my God, who gave me the life and the will to undertake this research.

A special vote of thanks goes to all members of the department of Anaesthesia for accommodating and supporting me through the masters program and the study.

I would also like to thank my supervisors Dr John Mark Kasumba, Dr Stone Luggya and Dr.Daniel Obua for all the support, corrections and valuable time rendered to me during the course of my studies and while supervising this thesis.

Many thanks, to my sponsors the Association of Anaesthetists of Great Britain and Ireland and Belgium Technical Corporation for their initial sponsorship at the start of and support during my postgraduate course.

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LIST OF ABBREVIATIONS

C/S	Caesarean section
I.V	Intravenous
NIBP	Non Invasive Blood Pressure
H.R	Heart Rate
R.R	Respiratory Rate
SPO_2	Oxygen saturation
PACU	Post Anaesthesia Care Unit
NSAIDs	Non Steroidal Anti Inflammatory Drugs
MAP	Mean Arterial Pressure
SHO	Senior House Officer
AAGBI	Association of Anaesthetists of Great Britain and Ireland
ADL	Activities of Daily of Living

DEFINITIONS

1. **Caesarean section**; incision through the anterior abdominal wall and the uterus for extraction of a viable foetus.

2. **Spinal anaesthesia**; loss of sensation produced by injection of local anaesthetic solution(s) into the spinal subarachnoid space.

3. **Time to break through pain**: the time from subarachnoid injection of bupivacaine/fentanyl to the first analgesic administration after caesarean section.

ABSTRACT

Background

Postoperative pain continues to negatively affect the quality of life in obstetric patients worldwide and Mulago national referral hospital in Uganda, with its high turnover of mothers, is no exception.

Research question:

Does 0.25mg/kg of intravenous ketamine during caesarean section under spinal bupivacaine/fentanyl reduce analgesic requirements in the first 24 hours of delivery in elective caesarean section in Mulago hospital?

Study objective:

To determine whether 0.25mg/kg of intravenous ketamine during elective caesarean section under spinal bupivacaine/fentanyl reduces analgesic requirements in the first 24 hours of delivery in elective caesarean section in Mulago hospital.

Study methods:

A prospective, randomized, double-blind, placebo-controlled trial was conducted in the gynaecology operating theatres of Mulago hospital among patients undergoing elective caesarean section

The study was registered by Pan African Clinical Trial Registry, **PACTR201404000807178**

Results: Indicated 0.25 mg/kg ketamine given before the first surgical incision prolonged the time to first break through pain by 22.5minutes, p-value 0.019.

Conclusion: Ketamine given before surgical incision prolongs the first time to break through pain but does not reduce analgesic requirements in the first 24 hours.