RECTAL MISOPROSTOL VERSUS INTRAVENOUS OXYTOCIN IN THE PREVENTION OF ATONIC POST PARTUM HEMORRHAGE AFTER VAGINAL DELIVERY

A thesis

Submitted for Partial Fulfillment of

M.SC. Degree in

Gynecology and Obstetric

By

Aya Mohamed saadawy

M.B.B.Ch.

Cairo university Faculty Of Medicine

Resident in dar el salam hospital

Supervised by

Dr. Fouad Abo Hemela

Assistant Prof. of Obstetric and Gynecology
Faculty of Medicine CAIRO University

DR. Walaa Ahmed Ibrahim

Lecture.of Obstetric and Gynecology
Faculty of Medicine CAIRO University

Faculty of Medicine

CAIRO University

2011

بسم الله الرحمن الرحيم

إقرأ باسم ربك الذى خلق {1}
خلق الإنسان من علق {2}
إقرأ وربك الأكرم {3}
الذى علم بالقلم {4}
علم الإنسان ما لم يعلم {5}

ω

سورة العلق الآيات 1- 5

Abstract

The aim of this study is to compare between IV oxytocin and rectal misoprostol in prevention of atonic post partum hemorrhage after vaginal delivery as regard efficacy and safety of each drug. the PPH is the main cause of maternal deaths which defined as bleeding from the genital tract of 500ml or more in the first 24 hours following delivery of the baby.

Key word: PPh, IV, OXYTOCIN, HEMORRHAGE

Acknowledgement

I would like to express my deepest gratitude and appreciation to DR *foUAD abo hemela* **Professor. Of Obstetrics and Gynecology Faculty Of Medicine cairo University** ***for his continuous guidance and precious encouragement. I feel great honor to work under his supervision.***

I am also greatly indebted to DR *walaa ahmed ibrahem* **lecturer. Of Obstetrics and Gynecology Faculty Of Medicine cairo University** ***for her faithful help ,sincere guidance and constant support that facilitated the completion of this work .***

Also,I woud like to express my deep thanks and gratitude for all members of the Departments of Obstetrics& gynecology Faculty of medicine , cairo university.

Aya mohamed saadawy

Contents

List of Tables

Continue

List of Figures

List of abbreviation

PPH……	*Post partum hemorrhage*
HCV……	Hematocrit value
IU……..	International unit
IV……..	Interavenous
Kg……..	Kilogram
STD……	Stander deviation
CC……..	Cubic centimeter
NO……..	Number
G.A……	Gestational age
L…….	Liter
Sig……..	Significace
temp……	temperature
PGE……	Prostaglindins E

Introduction

INTRODUCTION

Postpartum haemorrhage (PPH) accounts for around 28% of maternal deaths in developing countries[1]—that is, for over 125,000 deaths each year. There are about 125 million births annually in the developing world so the risk of maternal death from PPH is approximately 1 in 1000 deliveries there.
the risk of death from obstetric haemorrhage is about 1 in 100,000 deliveries[4].
The traditional definition — blood loss >500mL in the first 24 h — is now recognised to be of little clinical relevance. Blood loss after delivery is notoriously difficult to measure and PPH may be best defined by a fall in haematocrit or by the need for transfusion[8]. Regarding measured loss, we should now concentrate on major PPH — loss >1000mL[6].

.Although risk factors may increase a woman's chances in developing postpartum hemorrhage, two thirds of cases of postpartum hemorrhage occur without any predisposing factors , Risk factors for PPH include maternal obesity and a large baby in addition to well known factors such as antepartum haemorrhage ,multiple pregnancy ,prolonged labour. Maternal age: older women may be less able than younger women to withstand the effects of haemorrhage. Contrary to widespread belief, grand multiparity is not a risk factor, either in developed or developing countries

Persisting uterine atony may be due to retained products of conception and exploration of the uterus should be performed with care while resuscitation is proceeding. Intravenous oxytocin should be infused, usually 20 units in 500 mL saline at a rate not exceeding 100 milliunits/min. A second intravenous injection of Syntometrine or ergometrine may be given[5].

Moreover most uterotonics must be administered by injection, which requires sterile equipment and training for safe administration, These drugs must be refrigerated to

remain effective. prerequisites unavailable for most women delivering in low income countries (*Cohen, 1991).*

Several prostaglandins are used as second or third line agents.

Misoprostol was shown in several randomized controlled trials to be effective in preventing PPH because of its strong uterotonic effects. Moreover misoprostol is inexpensive and easy to administer *(Nellore et al, 2006).* Misoprostol, a prostaglandin E1 analogue, is heat stable and can be administered orally, rectally, or sublingually.

Oral and rectal misoprostol have been used for routine management of the third stage of labor. The main side-effects are shivering and pyrexia, which are dose-dependent. Physiological studies have also shown a more rapid onset of uterine contractions following syntocinon than misoprostol after delivery. Misoprostol has been widely recommended for the prevention of postpartum hemorrhage when other methods are not available *(Hofmeyr , 2004).*

Aim of the Work

AIM OF THE WORK

The aim of this study is to compare between IV oxytocin and rectal misoprostol in prevention of atonic post partum hemorrhage after vaginal delivery as regard efficacy and safety of each drug.

Review of Literature

Chapter 1