

Introduction

INTRODUCTION

The third stage of labor is potentially the most dangerous part for the mother, it commences after delivery of the infant and ends with the delivery of placenta (*Lam et al., 2004*).

The main risk is the occurrence of postpartum hemorrhage which is defined as bleeding from the genital tract of 500ml or more in the first 24hrs following delivery of the baby (*Gulmezoglu et al., 2002*).

Postpartum hemorrhage is the major cause of maternal mortality worldwide accounting for at least 150.000maternal deaths every year (*Cook et al., 1999*).

The decreased prevalence of postpartum hemorrhage in most developed parts of the world is due to better management of third stage of labor. However, this is not true in developing countries where Postpartum hemorrhage is estimated to be responsible for about 28% of maternal deaths (*Cook et al., 1999*).

There is now good evidence that prophylaxis with oxytocic drugs in the third stage of labor is effective in preventing post partum hemorrhage. Prevention of postpartum hemorrhage is preferable to even the best treatment (*Walley et al., 2000*).

Active management of the third stage of labor, consisting of administration of oxytocics, early cord clamping and cutting and delivery of placenta by controlled traction of the umbilical cord has been shown to lower the rate of postpartum hemorrhage (*Oboro and Tabowei, 2003*).

Conventional oxytocic agents used include oxytocin, the ergot alkaloids ergonovine (ergometrine) and methylergonovine (methylergometrine), syntometrine (which consists of 5 IU oxytocin [Syntocinon] +0.5mg ergometrine), and prostaglandins such as carboprost. (*Lokugamage et al., 2001*).

The drugs used currently to manage postpartum hemorrhage have their limitations. The search for an effective, easily stored affordable uterotonic agent in preventing Postpartum hemorrhage is of importance, especially in the developing world (*Lokugamage et al., 2002*).

Misoprostol is a synthetic 15-deoxy-16-hydroxy-16-methyl analogue of naturally occurring prostaglandin E₁. It is licensed for oral administration for the prevention and treatment of gastric ulcers. In recent years misoprostol has been widely studied for obstetrical and gynecological uses including cervical priming before surgical procedures (*Prendiville et al., 2002*). Also, it has been used for cervical ripening and induction of labor in term pregnancy (*Wing et al., 1999*), second trimester induction of abortion. (*tempeleton 1998*), and management of post partum haemorrhage and 3rd stage of labor (*Kundodyiwa et al., 2001*).

Misoprostal is proving an increasingly important drug in obstetrical and gynecological practice including the control of postpartum hemorrhage (*Cboro and Tabowei 2003*). It offers an alternative to the conventional uterotonics. It can easily be administered without syringes or I.V equipments, orally, rectally, vaginally or sublingually. It is inexpensive, easy to store and stable in field conditions (*El-Refaei, 1997*).