Introduction

Postpartum hemorrhage is the most common cause of maternal mortality and accounts for one quarter of all maternal deaths worldwide ***(WHO, 2005).***

Although the incidence of hemorrhage related deaths has dramatically declined in industrialized countries during the 20th century, Postpartum hemorrhage still remain as the leading cause of maternal mortality in developing countries ***(WHO, 1991).*** Worldwide, postpartum hemorrhage is responsible for up to 125,000 maternal deaths per year and is associated with morbidity in 20 million women per year ***(ACOG, 1998).***

Prophylactic use of an oxytocic agent after delivery of the infant has been shown to reduce the incidence of postpartum hemorrhage by 40% ***(Nordstrom et al.., 1997).*** There are potential problems with the parentral use of oxytocin and methylergonovine maleate, such as the need of protection from light, requirement of refrigeration, the need of clean needles & syringes (an important consideration in the era of hepatitis and human immunodeficiency Virus infection) ***(EL-Refaey et al., 2000).*** On the other hand, methylergonovine maleate is ineffective in reducing postpartum hemorrhage when administered orally ***(De Groot et al., 1996).***

Syntometrine is contraindicated in about 15% of women because of preexisting pregnancy induced hypertension ***(Karim, 1987).*** Also, it is associated with unpleasant side effects such as nausea and vomiting ***(El-Refaey et al., 1996).***

Misoprostol is a synthetic prostaglandin E1 analogue that has potent uterotonic properties and few side effects at therapeutic doses ***(Acharya et al., 2001).*** Misoprostol is absorbed readily orally, vaginally and across the mucus membranes of the rectum and oral cavity ***(Tang et al., 2002).***

Misoprostol has gained attention over the past few years as an inexpensive and thermostable drug that does not require refrigeration for storage. Misoprostol may be considered an alternative to oxytocin which does not require injection in cases of postpartum hemorrhage ***(Sanghvi et al., 2004), (Hofmyer et al., 2005).***

Many studies reported the use of misoprostol for the prevention and treatment of postpartum hemorrhage after vaginal delivery. However, few studies investigated the use of misoprostol immediately after cesarean delivery ***(Villar et al., 2002).***

Recently, oral misoprostol was reported effective in reducing intraoperative blood loss during cesarean delivery ***(Acharya et al., 2001), (Lokugamage et al., 2001).***

Buccal misoprostol may be an ideal route of administration, avoiding vaginal examination and frequent gastrointestinal side effects associated with oral misoprostol administration ***(Carbonell et al., 2001).***

Buccal misoprostol insures a continuous plasma level of a potent uterotonic agent over a prolonged period ***(Meckstroth et al., 2006)***. This especially may be helpful in patients who are at risk of bleeding but have contraindications to the most frequently used secondary uterotonic agents, methylergonovine, or 15- methyl prostaglandin F2 alpha ***(Tang et al., 2002).***