

Prevention of Postpartum Hemorrhage: Our Options

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In many deprived areas of the world, motherhood is associated with high morbidity and mortality. Lack of skilled birth attendance, unavailability of appropriate equipment and inadequate caregivers training have important roles in decreasing maternal safety in some middle-income countries (1). Postpartum hemorrhage (PPH) as a preventable cause of maternal mortality and morbidity is responsible for approximately 25% of maternal mortality worldwide and up to 60% in some countries (2). Each year, postpartum hemorrhage is diagnosed in 14 million women, of them 140,000 die and 1.6 million will become anemic (3). The prevalence of PPH is 18% of all deliveries (4). Approximately, no risk factors for PPH exist in two-thirds of women, therefore, all women are at risk and prevention of PPH must be considered in all deliveries. Active management of the third stage of labor (AMTSL) is recommended by the world health organization (WHO), international federation of gynecologists and obstetricians (FIGO), and the international confederation of midwives (ICM) for reducing the risk of PPH in all vaginal deliveries. AMTSL is consisted of prophylactic administration of uterotonic drugs (intramuscular oxytocin 10 IU), controlled cord traction, and fundal massage after placental delivery (5).

There are many uterotonic agents (other than oxytocin) that can be used for the prevention of PPH. One of these drugs is syntometrine, which has similar effects to intravenous oxytocin (6). Another drug is carbetocin, a long-acting synthetic analogue of oxytocin, which can be used for the prevention of PPH in low-risk women (6, 7) and the other drug is misoprostol. It is a synthetic analogue of prostaglandin E₁ that can be given orally, sublingually, rectally, and vaginally with different dosages (200 - 1000 µg) and recommended to prevent PPH when other methods are not available (5).

Our previous experiences on using syntometrine, misoprostol, and carbetocin after placenta removal showed

that administration of 600 µg rectal misoprostol or 100 µg carbetocin is more effective than syntometrine in the prevention of PPH (8, 9). Although these drugs had a better effect on PPH prevention, their use is not routine in maternity centers in Iran and access to these drugs is difficult. Midwives and obstetricians should be familiar with the effects of such drugs and their use if necessary. For safer motherhood, a holistic approach, including more attention to all parturients, especially women with anemia and women in low-resource societies; active management of the third stage of labor; access to more effective uterotonic agents; and high quality retraining programs for midwives and other skilled birth attendance are needed.

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