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# The Use Misoprostol For Active Management Of Third Stage Of Labour

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The third stage of labor is still the most important stage as its grave complications are direct factors in maternal morbidity and mortality. Fortunately, most of the complications of the third stage of labor are preventable if managed carefully. The management of the third stage of labor is still controversial. Some authors advocate conservative management while others prefer active management to shorten the third stage and thus minimizing, as possible - its complications. The active management of the third stage of labor is the one which is recommended by most obstetricians. Several methods of active management have been described as Brandt-Andrews methods, cord traction or routine manual separation of the placenta. The use of prophylactic oxytocics in the management of the third stage is widely accepted. The most commonly used oxytocics are the oxytocin, or its synthetic forms as syntocinon or pitocin, ergot alkaloids as ergometrine or methylexergometrine (methergine) which are the two preparations commonly used, and prostaglandins or its derivatives such as misoprostol which is a prostaglandin E<sub>1</sub> analogue (cytotec or misotac). This study was conducted on two hundred parturients attending the department of obstetrics and gynecology, Benha Faculty of Medicine, Zagazig University. The aim of this work was to compare the efficacy, safety of oral misoprostol and syntometrine in management of third stage of labor as well as the adverse effects of both drugs. Our subjects have been divided into two comparable groups:

- Misoprostol group (group A) given oral misoprostol (600 µg) orally just after clamping of the cord.
- Syntometrine group (group B) given combined oxytocine 5 IU and ergometrin 0.5mg (syntometrine) intramuscularly just after clamping of the cord.

No mechanical intervention for delivery of the placenta was done until the signs of placental separation appeared. The length of the third stage, the amount of blood loss during and after the third stage of labor for one hour after delivery was estimated clinically and by hematologic study. The occurrence of postpartum hemorrhage, the incidence of manual separation of the placenta, the need for further therapeutic oxytocics and the adverse effects were also reported. Oral misoprostol was found to be more effective, more safe and less adverse effects than intramuscular syntometrine in management of third stage of labor. The present study revealed the following:

- 1- The administration of oral misoprostol shortens the third stage of labor when compared with the intramuscular syntometrine.
- 2- The administration of oral misoprostol reduces the amount of blood loss during the third stage of labor and its reflection on the hematologic values

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(Hb%, Hematocrite) when compared with intramuscular syntometrine.3- With oral administration of misoprostol the incidence of manual separation of the placenta with its complications is much lower than when compared with intramuscular syntometrine.4- The side effects of oral misoprostol as regard its occurrence and severity are lower in misoprostol group than in syntometrine group. In conclusion: Oral misoprostol has a significant effect on shortening the duration and reducing the blood loss of the third stage of labor when compared with intramuscular syntometrine and also, the incidence of manual separation of the placenta and subsequent administration of therapeutic oxytocics was reduced. Thus the availability of an oral, effective, safe, thermostable drug, with less adverse effects for routine management of the third stage of labor may have considerable benefits in preventing postpartum haemorrhage and perhaps reduce maternal morbidity and mortality in developing countries.