Acomparison of opally administered misoprostol with vaginally administered misoprostol for cervical ripening and labor induction

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Prostaglandins of the F and E series produce strong uterine contraction and therefore have been widely used for the induction of labor in late pregnancy and as abortifacient agents in early pregnancy.The use of natural Prostaglandins has been limited by their instability, high cost, rapidMetabolism and high incidence of gastrointestinal side effects (Egarter et al., 1990 & Calder, 1999).Misoprostol (Cytotec), a synthetic PGE1 analogue, is an effective as dinoprostone for preinduction cervical ripening and induction of labor in patients with low Bishop score.Misoprostol is inexpensive, safe and simple to administer because it is placed in the vagina or given orally (Cherman et al., 2001, Birlain et al., 2001 & Ozan et al., 2001) .Several studies evaluated the vaginal route of misoprostol induction of labor . However, only few studies evaluated the oral rout for induction of labor and still fewer number of studies compared the oral versus the vaginal routes.The aim of this study is to compare between the vaginal and oral routes of misoprostolAdministration for cervical ripening and labor induction .The study included 100 pregnant females with different indications for labor induction .Women were enrolled into tow groups, each containing 50 women. In the vaginal group,induction of labor was by 50 ug and in the oral group, induction of laborwas by 100 ugmisoprostol .The Bishop score changes were used to evaluate the effect of each rout on cervical ripening and labor induction . Cardiotocographic monitoring was used to evaluate the effects on uterine contractions and fetal heart rate.All cases were followed up till delivery. Induction-activation interval, Induction-deliveryInterval , mode of delivery , uterine contraction abnormalities, fetal heart rate changes, fetal outcome, Apgar score and maternal side effects were recorded and evaluated.Our result showed that; vaginal administration was accompanied by significantly shorterInduction activation and Induction delivery Intervals, but also accompanied by a higher incidence of abnormal uterine contractile activity, including hyperstimulation syndrome and tachysystole.Successful outcome was achieved in 42 cases (84%) in the vaginal group and in43 cases (86%) in the oral group.Maternal side effects were insignificant, disappeared spontaneously without medication .