

2. Abstract

A study of prostaglandin E₂ for cervical ripening prior to induction of labour.

Objective: To compare the efficacy of prostaglandin E₂ for the unripe cervix, effect of parity on Bishop's score, incidence of obstetric intervention, neonatal out come and maternal complications.

Design: Double blinded randomized control trial.

Setting: In a Busy tertiary care center in Sri Lanka.

Study population: One Hundred and twenty eight pregnant women at term with medical or obstetric indications for induction of labour and unfavorable cervix

Method: The women were randomized to receive either prostaglandin E₂ vaginal Pressaries or no insertion of tablets. Maternal and fetal monitoring was done in both groups.

Mean change of Bishop's score, mode of delivery, fetal morbidity (Apgar score, meconium stained, SBU admission) and maternal morbidity was noted.

Results: Prostaglandin E₂ Pressaries improved the Bishop's score and ensured successful vaginal deliveries in 53% patients in the study group. Caesarian section rate was more in the control group. (100%) as compared to the study group (47%) which has also statistically significant

There was no measurable difference in the fetal condition at birth and maternal complications

There was a significant difference in multipara compared to nullipara in post event Bishop's score (P<0.001)

Conclusions: Prostaglandin E₂ significantly improves the Bishop's score and makes the cervix favorable for induction of labour. Effect of PGE₂ on Bishop's score was seen more in multipara than in nullipara. It also associated with a low caesarean section rate and there was no any significant side effect.

Recommendations: Prostaglandin E₂ Pressaries can be used as a safe and effective method of ripening of cervix prior to induction of labour in patients with unripe cervix in obstetric units in Sri Lanka

Multi center study can be carried out in Sri Lanka to prepare guidelines, safety and cost-effectiveness in the use of prostaglandin to ripen the cervix prior to induction of labour.