ABSTRACT

INTRODUCTION: Since antiquity, various methods have been used in attempt to bring on labor. The incidence of labor induction has continued to rise over the past several decades. The World Health Organization Global Survey on Maternal and Perinatal Health, conducted in 24 countries which included nearly 3,000,000 observations, showed that 9.6% of them were delivered by labor induction. At times, despite an unripe cervix, induction of labor may be needed. In these cases, a safe and suitable method should be considered for cervical ripening and pregnancy termination and various methods of induction are available. Although the best agent and method for induction of labor remains uncertain and needs further research, it is biologically plausible that a combination of a mechanical device (Foley’s bulb) and chemical agent (misoprostol) may have an additive or synergistic effect, resulting in a greater degree of cervical ripening and shorter induction to delivery time.

AIMS AND OBJECTIVES: To test the hypothesis that the use of Foley’s bulb plus vaginal Misoprostol will result in shorter induction to delivery time compared with vaginal Misoprostol alone.

METHODS AND MATERIALS: This is a hospital based comparative study done in pregnant mothers (after 34 completed weeks) admitted in the department of Obstetrics and Gynecology R.M.H during October 2015 to March 2016. 200 patients after obtaining informed written consent; patients were randomly allocated to one of the two study groups.

Group 1 Misoprostol alone group

Group 2 combination of Foley bulb with vaginal Misoprostol

Women with Foetal malpresentation. Multi foetal gestation. Spontaneous labor (regular uterine contraction with cervical change), more than five uterine contractions in ten
minutes. Contraindications to prostaglandins. Category II or greater fetal heart rate tracing. Anomaly foetus. Foetal demise. Previous cesarean other uterine surgeries, Fetal growth restriction were excluded. The primary outcome measured was induction-to-delivery time.

The secondary outcomes measured were

- Mode of delivery
- APGAR score at 1 min and 5 min
- NICU admissions
- Change in Bishop’s Score

**RESULTS:** The mean induction to delivery time for Foley’s with misoprostol group is shorter (12.71) than Misoprostol alone group (14.68). With statistically significant p-value <0.05. In the present research study there was statistically significant Bishop’s score, the p-value was <0.05. The mean Bishop’s score for vaginal misoprostol alone and Foley’s plus vaginal misoprostol was 8.68 and 10.56 respectively. In our study APGAR scores done at different time interval showed statistically insignificant p-value 0.95 for the 1st minute and p-value 0.55 for the 5th minute in both study groups. There were no admissions of neonates in the NICU in both the study groups.

**CONCLUSION:** The results of this comparative study showed that the use of Foley’s with vaginal misoprostrol results in a shorter induction to delivery time compared with vaginal misoprostol alone.