

## Abstract

**Background:** Induction of labor at any time before the spontaneous onset of labor is indicated when the benefits of termination of pregnancy for the mother and fetus outweigh the benefits of continued pregnancy.

**Aim:** The aim of this study was to compare the effect of vaginal mesoprostol alone and in combination with evening primrose capsule on the course of labor in pregnant women candidates for termination of pregnancy.

**Materials and Methods:** In this double-blind randomized intervention study, 30 pregnant women with a gestational age of 38-42 weeks who referred to Alavi Hospital in Ardabil and were candidates for termination of pregnancy were included in the study. At the time of referral, the examination was performed to calculate the bishop score (primary outcome) and the partograph was recorded and plotted once every hour until the end of labor. , Length of active phase of labor (from dilatation 3-6 cm to birth), type of labor, Apgar score of the first and fifth minute of the baby and volume of postpartum hemorrhage to the end of labor phase based on blood pads and pain intensity every 30 minutes Pain was recorded in two groups for up to 2 hours using a ruler. The data were analyzed in SPSS software using statistical methods.

**Results:** : The two groups did not have statistically significant in age, maternal weight, neonatal weight, gestational age, education, pain intensity, length of active labor phase, type of delivery, bleeding volume and neonatal Apgar score.

The mean length of the latent labor phase in the misoprostol and evening primrose groups was  $9.07 \pm 0.96$  and in the misoprostol group was  $10.13 \pm 0.83$  hours. And this difference was statistically significant ( $p = 0.003$ ). The mean bishop scores of the samples at the beginning of the study were 2 and 4 hours after the intervention in the group receiving misoprostol and evening primrose

were 3, 6 and 8, respectively, and in the group receiving misoprostol were 3, 5 and 7, respectively. According to Mann-Whitney test, there was no significant difference in bishop score between the two groups at the beginning of the study. Bishop score after the intervention was significant between 2 and 4 hours after the intervention between the two groups and was higher in mothers receiving misoprostol and evening primrose.

**Conclusion:** Our study shows that it is better to use evening primrose instead of misoprostol or at least next to it as a supplement to induce labor.

**Keywords:** Misoprostol - Evening primrose - Induction of labor