

Evaluation of the effects of taking evening primrose oil (EPO) capsules from 38th week of pregnancy in nulliparous women (labor/induction/outcomes)

Amirkavian Moaveni

University of Kurdistan, Iran

Introduction: Evening primrose (*Oenothera biennis*) is a medical plant from North America. Evening primrose oil (EPO) contains gamma-linolenic acid (GLA) that stimulates the production of prostaglandins in body. It is believed initiate cervical ripening due to EPO. The aim of this study was to evaluate the effects of taking EPO from 38th week of pregnancy in nulliparous women on the type of delivery, induction need, duration of induction, labor duration, neonatal outcomes, quality of labor and maternal complications.

Methods: In double-blind randomized controlled trial performed in Sanandaj Besat Hospital, 440 nulliparous pregnant women in 38th week of pregnancy and with bishop score of <6 were divided randomly in to two groups (220 in each). First group took EPO 1g Q12h and next group took placebo. In the other part of the study women that did not enter to labor phase until 40th week of pregnancy from both groups, were evaluated during the induction by oxytocin to check the effects of EPO on induction and outcomes.

Results: Normal labor (vaginal or cesarean delivery) without needed of induction was occurred in 134 (60.9%) women of EPO group (15 C/S (11.19%) and 119 NVD (88.80%)) and 122 (55.45%) women of placebo group (21 C/S (17.21%) and 101 NVD (82.78%)). Frequency of cesarean section deliveries decreased significantly in EPO group compared with placebo group. 86 (39.09%) women from EPO group and 98 (44.54%) women from placebo group needed induction (oxytocin) for delivery that the rate of successful vaginal delivery was significantly higher in EPO group and duration of active phase, second stage and third stage of labor were shorter in EPO group. No significant difference of neonatal factors and outcomes (such as 1st and 5th min Apgar score/need for NICU admission) were found between the EPO and placebo groups.

Conclusions: This research showed significant positive results of taking EPO capsules from 38th week of pregnancy in nulliparous women, on the type of delivery (decrease cesarean section), length of labor, need for induction, duration of induction and success rate.