

Dose it reasonable to offer elective induction of labor to low-risk nulliparous women after 39 weeks?A retrospective analysis.

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Abstract

Objective To investigate the effect of induced labor on maternal and fetal pregnancy outcome. **Methods** This is a retrospective case-control study. In this study, a total of 4386 pregnant women with singleton low-risk who underwent regular prenatal examination and successful vaginal delivery at or more than 41 weeks 0 days of gestation in Fujian Maternal and Child Health Hospital from January 2014 to December 2018. Review the clinical data, according to the mode of labor initiation, they were divided into induced labor group (2007 cases) and spontaneous onset of labor group (2361 cases). Further stratified analysis was carried out according to age and parity. **Results** The total duration of labor in the induced labor group was significantly longer than that in the spontaneous onset of labor group [(9.37 ± 5.37) vs (8.82 ± 5.13) h, $P < 0.001$], associated with more postpartum blood loss [(219.18 ± 188.32) vs (199.95 ± 124.69) mL, $P = 0.01$], and the incidence of severe postpartum hemorrhage (sPPH) was significantly higher [$0.8\% (16/2007)$ vs $0.33\% (8/2361)$, $P = 0.041$]; increase but no significant difference in the incidence of postpartum hemorrhage (PPH) [$3.8\% (77/2007)$ vs $2.8\% (66/2361)$, $P = 0.054$]. After adjusting for age, the operation of induced labor in nulliparous is more likely to occur PPH [$2.74\% (55/2007)$ vs $1.65\% (39/2361)$; $OR = 1.557$; $95\% CI: 1.039 \sim 2.332$, $P < 0.05$]. **Conclusion** Selective induction of labor increases the postpartum blood loss, especially primary parturients to increase the risk of postpartum hemorrhage, may be related to the prolongation of the total stage of labor. Low-risk nulliparous women should try to avoid induction without medical indication

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Fig.1 Flow chart of subject selection.docx available at <https://authorea.com/users/469368/articles/562282-dose-it-reasonable-to-offer-elective-induction-of-labor-to-low-risk-nulliparous-women-after-39-weeks-a-retrospective-analysis>

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Fig. 2 The relationship between the total duration of labor and postpartum blood loss.docx available at <https://authorea.com/users/469368/articles/562282-dose-it-reasonable-to-offer-elective-induction-of-labor-to-low-risk-nulliparous-women-after-39-weeks-a-retrospective-analysis>