GDM at term: induction of labor versus expectant management
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Objective
As the alternative for induction of labor (IOL) is not spontaneous onset of labor, but rather expectant management, we aimed to use that methodology in order to determine the impact of IOL on pregnancy outcome in women with gestational diabetes mellitus (GDM).

Methods
A retrospective cohort study, of all women with GDM and a singleton gestation who delivered at term (37+0-40+6 weeks) in a single, tertiary, university affiliated medical center (2007-2014). Neonates with structural or chromosomal anomalies were excluded, as well as women with pre-GDM. At each gestational week, women who underwent IOL were compared with women who delivered at a later gestational week (IOL at 37 was compared with delivery at 38-40 weeks, IOL at 38 weeks with delivery at 39-40 weeks, etc.). Composite outcome was defined as ≥1 of the following: Cesarean delivery(CD) due to suspected macrosomia or arrested labor, 5-min Apgar score<7, shoulder dystocia, 3rd-4th degree perineal tear, birth asphyxia, seizures, umbilical cord pH<7.05, hypoglycemia, RDS, mechanical ventilation, clavicular fracture, Erb's palsy.

Results
Overall, 3,030 GDM patients were included in the study. The rates of women undergoing IOL was 3.4% (102/3030) at 37 weeks, 17.8% (380/2139) at 38 weeks, 17.1% (219/1280) at 39 weeks and 31.2% (179/574) at 40 weeks. 1. At each gestational week, the rate of meconium was lower in the IOL group at 38 and 40 weeks, rate of normal vaginal delivery (NVD) was higher at 40 weeks and rate of operative vaginal delivery (OVD) was lower at 37 weeks mainly due to prolonged second stage of labor. 2. The rates of cesarean delivery (CD) indicated by non reassuring fetal heart rate tracings was higher in the IOL group at 37 weeks, and the rate of CD due to prolonged first stage of labor higher at 38 weeks. 3. The rates of cesarean delivery (CD) indicated by non reassuring fetal heart rate tracings was higher in the IOL group at 37 weeks, and the rate of CD due to prolonged first stage of labor higher at 38 weeks. 4. The rate of neonatal composite outcome was higher in the IOL group at 37 and 38 weeks of gestation. Multivariate logistic regression model accounting for parity, previous cesarean section, LGA neonate and induction of labor demonstrated that IOL was an independent contributor to composite neonatal outcome at 37 (aOR 1.97, 95% CI 1.26-3.07) and 38 weeks (aOR 1.36, 95% CI 1.03-1.81), but not at 39 weeks (aOR 1.25 95% CI 0.84-1.86) or 40 weeks (aOR 0.88 95% CI 0.46-1.86) of gestation.

Conclusion
Compared with expectant management, induction of labor in GDM prior to 39±0 weeks of gestation is associated with adverse perinatal outcomes.