

ISP-11-3 Safety of elective induction of labor in breech vaginal delivery

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[Objective] Our expectant management for breech vaginal delivery was changed to elective induction of labor (IOL) in 2006. This study aimed to determine the safety of elective IOL in breech vaginal delivery. [Methods] We analyzed 258 cases of breech singleton delivery after 35th week without any other indications of cesarean section (CS). The mode of delivery was elective CS or trial of labor (TOL), through informed consent. TOL cases were historically divided into 2 cohorts, expectant management (Group E) or elective IOL (Group I), induced with intravenous oxytocin and metreurynter after hygroscopic cervical dilators. [Results] In all, 154 women selected elective CS (Group CS) and 104 women selected TOL (Group E: 52, Group I: 52). Among the 3 groups, there was no significant difference in neonatal weight, severe neonatal asphyxia at 5 min, and NICU admission. The umbilical artery pH in Group I was not significantly different from that in Group CS ($p = 0.12$); the pH in Group E was significantly lower than that in Group CS ($p < 0.01$). Severe asphyxia at 1 min in Group I (3.8%) was equal to that in Group CS (3.2%, $p = 0.99$); that in Group E (11.5%) was significantly higher than in Group CS ($p < 0.05$). Compared to Group E, successful vaginal breech delivery rate of Group I was significantly lower ($p < 0.05$). [Conclusion] Elective IOL in breech vaginal delivery is not riskier than elective CS.

**ISP-11-4** Is exposure to general anesthesia associated with depression after cesarean section?

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[Background] Depression after delivery is a major concern for women's health. The association between general anesthesia and depression after cesarean section (CS) was unknown. [Methods] We used Taiwan's National Health Insurance Research Database to identify 8233 women underwent CS with general anesthesia. Propensity score matching was performed to select women underwent CS with epidural or spinal anesthesia. The negative binomial regression was performed to calculate relative risk (RR) and 95% confidence interval (CI) of depression after CS one year associated with general anesthesia. [Results] After propensity score matching by age, low income, urbanization, CS in teaching hospital, emergency operation, and coexisting medical conditions, women with general anesthesia had higher risk of depression (with physician's primary diagnosis) after CS one year compared with those with epidural or spinal anesthesia ($RR = 1.50$, 95% $CI = 1.26-1.78$). The corresponding RR of depression after CS one year associated with general anesthesia for physician's any diagnosis, psychiatrist's primary diagnosis, and psychiatrist's any diagnosis were 1.35 (95% $CI = 1.18-1.55$), 1.53 (95% $CI = 1.22-1.91$), and 1.50 (95% $CI = 1.21-1.86$), respectively. [Conclusion] Our population-based study suggested that exposure to general anesthesia may be associated with depression after cesarean section.