Comparison of neonatal complications between Cesarean delivery and normal vaginal delivery

Saeidi Reza (IR) [1], Maamouri GholamAli (IR) [2], Ayati Sedigheh (IR) [3], Rahmani Shaghayegh (IR) [4]

Background: The appropriateness of the rising rate of cesarean delivery worldwide has been debated widely. U.S. cesareans have risen 40% since 1996. IRAN cesareans section rate is 40% nowadays. However, the high rate of cesareans in the United States has not resulted in improved outcomes for babies or mothers. So must make a decision to lowered rate of SC with out risen of neonatal complications. The aim of this study is to evaluate neonatal complications in caesarian section and vaginal delivery.

Method: We conducted observational study of all women with a singleton gestation and a prior cesarean delivery at 2 academic medical centers in Masshad medical university. Perinatal outcomes were compared between 770 neonates who had born with a normal vaginal delivery and neonates who had born with an elective cesarean delivery without labor.

Results: Vaginal delivery was attempted by 344 women, and 426 women underwent elective cesarean delivery without labor. Asphyxia occurred in 30 infants whose mothers underwent elective cesarean delivery and in 11 infants born at term whose mothers underwent a trial of labor (P<0.001). Planned cesarean delivery decreased rates of low Apgar score from 11.2% to 17.8% (P < .001). The risk for pulmonary disorders (transient tachypnea of the newborn infant and respiratory distress syndrome) rose from 9% to 4.6% (P =0 .001) in elective cesarean delivery.

Conclusion: Fetal complications like RDS were significantly higher in cesarean section versus vaginal delivery.

Keywords: neonate, cesarean delivery, normal vaginal delivery