

Endometriosis and Adverse Pregnancy Outcomes: A Case-Control Study

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Abstract

Objective: The association between endometriosis and the outcome of pregnancy is one of the interesting topics. Endometriosis-related pain is alleviated with pregnancy; however, it is known to cause adverse outcomes in pregnancy. The main cause is systemic chronic inflammation caused by higher levels of cytokines, growth factors, and angiogenesis factors.

This study aimed to clarify the relationship between endometriosis, deep endometriosis, adenomyosis, surgical treatment, and poor maternal consequences.

Methods: In this case-control study, data from 250 women who gave birth in Hazrat Rasoul Akram hospital, Tehran, Iran, from February 2015 to December 2019, was extracted from the hospital information system in January 2020. Participants were divided into 2 groups: 125 women with endometriosis and 125 women without endometriosis. We looked at how endometriosis affected mothers and newborn babies. Data on pregnancy, delivery, and newborns of both groups was extracted.

Results: The mean age of participants was 32.74 ± 4.10 and 31.7 ± 5.53 yr in the endometriosis and control group, respectively. In terms of pregnancy complications, placenta previa, placenta accreta, placenta abruption, pre-eclampsia, gestational diabetes mellitus, and postpartum hemorrhage remarkably increased in the endometriosis group compared to the control group. placenta accrete significantly increased in the endometriosis group. Of 6 women with placenta accreta, 2 had a history of previous CS, and the rest were primigravida

Small for gestational age was significantly higher in rectal endometriosis than women without rectal endometriosis ($p = 0.03$). The neonatal intensive care unit admission rate was notably higher in infants of the endometriosis group compared to controls (40.7% vs. 24.8%, $p = 0.009$).

Conclusion: Our findings showed women with endometriosis are at a higher risk for important adverse maternal outcomes and they benefit from increased surveillance during pregnancy to prevent neonatal and maternal complications.

Keywords

Endometriosis, adverse Pregnancy outcomes.