# The effect of endometriosis on IVF/ICSI and perinatal outcome : a systematic review and meta-analysis

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## Abstract

**Purpose:**The purpose of the study was whether endometriosis influences IVF/ICSI and subsequent pregnancy and obstetric outcomes.

**Methods:**Searches were performed on PubMed, EMBASE, Medline and Web of Science. Most of the included studies were retrospective case control study and retrospective cohort study.The risk ratio with 95% confidence intervals were calculated using the random and fixed effects model. Random effects models were applied in the case of significant heterogeneity (I2>50%), and fixed effects models were used if the heterogeneity was not significant.The main outcome measure was the live birth rate.

**Results:**Seventy studies were included in our analysis. Compared with the control group, the implantation rate (p = 0.04) and the number of oocyte retrieved (p<0.00001) were significantly lower in women with endometriosis. About late pregnancy complications, there were significant statistical differences in multiple pregnancies rate, placenta previa rate, ectopic pregnancy rate, postpartum hemorrhage rate between the two groups (P<0.05). All other major reproductive and obstetric outcomes were similar in women with and without endometriosis.

**Conclusions:**Our results demonstrate women with or without endometriosis have similar reproductive outcomes, but women with endometriosis who conceived after assisted reproductive technology are in high risk pregnancy.

**Keywords:**assisted reproductive technologies; endometriosis; in-vitro fertilization; live birth; obstetric; pregnancy.