

## POSSIBLE INFLUENCE OF OVARIAN ENDOMETRIOSIS ON THE PREGNANCY FOLLOWING IN-VITRO FERTILIZATION AND EMBRYO-TRANSFER

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**Background:** There is ongoing controversy whether ovarian endometriotic cysts should be operated before in-vitro fertilization (IVF) or not. The general recommendations are that surgical removal of these cysts is not absolutely necessary before the IVF procedure. On the other hand, some publications showed that their presence might have influence on pregnancy in women who conceived with IVF.

**Aim:** To evaluate the possible influence of the ovarian endometriosis on the pregnancy following in-vitro fertilization and embryo-transfer.

**Material and Methods:** patients-pregnant women who have conceived a singleton pregnancy with IVF and embryo-transfer. The only accepted associated condition was the presence of ovarian endometriosis. Exclusion criteria: any other risk factor. The study was retrospective observational case-control, where we have analysed data extracted from medical charts and computerized data-base of a gynecological outpatient clinic. Outcomes of interest were: length of pregnancy and birth weight of the term newborns.

**Results:** 39 women with and 81 women without ovarian endometriosis were analysed. 76.92% and 81.48% of them had live-born newborns, respectively. Regarding pre-term deliveries, the results have shown Absolute Risk Reduction (AAR) of 3% and Relative Risk Reduction (RRR) of 3.4% with wide confidence interval (CI), in favour of pregnancy without ovarian endometriosis, yet statistically non-significant. Regarding low birth weight in term newborns, the ARR and RRR were zero, thus showing no statistically significant difference in this variable, too.

**Conclusion:** Women with ovarian endometriosis who successfully conceived with IVF, do not have significantly higher risk of adverse early determinants of the pregnancy, delivery and neonatal outcomes than women conceived with IVF without ovarian endometriosis. However, more research is needed to establish the influence of ovarian endometriosis on gross perinatal outcomes.

**Key words:** pregnancy, in-vitro fertilization, ovarian endometriosis.

**Topic:** Reproductive surgery