



P28. META-ANALYSIS OF STUDIES EVALUATING THE ASSOCIATION OF ENDOMETRIOSIS AND GESTATIONAL DIABETES MELLITUS.

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Objective: Since individual studies about the association of endometriosis and gestational diabetes mellitus (GDM) have demonstrated inconclusive results, the current systematic review and meta-analysis was performed to derive a more precise estimation of the link of endometriosis and the risk of GDM.

Methods: We searched Medline, Embase, Web of Science, Cochrane Library, Scopus and Scielo for observational studies (from inception to April, 2017, with no language restriction) evaluating GDM and related outcomes in women with and without endometriosis, who conceived spontaneously or by assisted reproductive technology (ART). Meta-analyses were conducted using Review Manager 5.2. Odds ratios (ORs) and their 95% confidence intervals (CIs) or mean differences (MDs) were calculated as effects. Mantel-Haenszel fixed-effects models were used due to expected scarcity of outcomes. Heterogeneity among studies was described with the I² statistic.

Results: We identified 7 studies (5 cohort and 2 case control) with a total of 322,119 pregnancies, including 2,750 in women with endometriosis. Endometriosis had no significant effect on GDM risk (OR = 1.26; 95% CI: 0.83, 1.90; p=0.28, I²=75%). Subgroup analyses showed similar results to the main analysis. In 4 studies, mean birthweight was lower (- 149.33; 95% CI: -287.24, -11.42 grams; p=0.03; I² =92%) in women with endometriosis.

Conclusion: Endometriosis was not associated to GDM risk; however, better-designed studies are needed to confirm our results.

Keywords: Assisted reproductive technology; endometriosis; gestational diabetes mellitus; infertility; meta-analysis; spontaneous conception

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