

P154. Origin of placental disorders after assisted reproduction: Assisted reproduction itself or Endometriosis as its indication

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Context - Assisted reproduction(AR) increases the risk of adverse pregnancy outcomes, including placental disorders. However, the impact of endometriosis on placental disorders remains controversial, particularly in women undergoing AR. Endometriosis may be responsible for an increased incidence of placental disorders due to the increased concentrations of hormones, inflammatory cells, oxidative stress and iron in endometrium milieu compared to healthy unaffected women. **Objective** - compare in terms of placenta disorders events women with and without endometriosis undergoing AR, in order to establish if AR itself or endometriosis, as an indication to AR, determines these adverse pregnancy outcomes. **Methods** - meta-analysis **Patient(s)** - women with and without endometriosis undergoing AR who experienced Placental disorders **Intervention(s)** - Literature searches were conducted in November 2017 using electronic databases(PubMed, Medline, Scopus, Embase, Science Direct, and the Cochrane Library Scopus). Series comparing pregnancy outcome after ART in women with and without endometriosis were screened and data on placenta previa and placenta abruption were extracted. **Main Outcome Measure(s)** - Placental disorders included placenta previa and placenta abruption **Result(s)** - Five retrospective case-control studies met the inclusion criteria. The meta-analysis revealed that endometriosis is associated with an increased risk of placenta previa in pregnancies achieved through ART (Odds Ratio: 2.96 [95% CI 1.25-7.03]; p=0.01, I²=69%, Random-effect model). No differences in placenta abruption incidence were found (Odds Ratio: 0.44 [95% CI 0.10-1.87]; p=0.26, I²=0%, Fixed-effect model). **Conclusions**-Patients with endometriosis undergoing ART may have additional risk of placenta previa; a more careful counselling and screening should be required accordingly.

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