

Egyptian Fertility Sterility Society

The 29th Editorial

Prof. Ibrahim Mahrous, Al Azhar University

Dr. Mohamed El Sherbiny, MOH

Do obstetric outcomes after IVF/ICSI differ in women with endometriosis and/or adenomyosis, compared to women without the disease?

What Is Known Already?

Evidence regarding the impact of endometriosis and/or adenomyosis on obstetric outcomes remains inconsistent, largely due to heterogeneity in study design, diagnostic methods, disease criteria, and mode of conception of the included pregnancies. [1]

While several studies and meta-analyses have reported increased risks of preterm birth (PTB), hypertensive disorders of pregnancy (HTD), placental abnormalities, and caesarean delivery among women with endometriosis or adenomyosis (Lalani et al., 2018[2]; Horton et al., 2019[3]; Busnelli et al., 2024[4]; Vendittelli et al., 2025[5], others have not found such associations (Bean et al., 2024).

What Is New?

A recent prospective, observational cohort study of 1035 women [6], who aged 25 to ≤ 39 years, with a BMI of 18 to < 30 kg/m² and no previous children with the present partner. They underwent up to 3 consecutive IVF/ICSI treatments.

This recent study reported an increased obstetric risk of:

1-Preterm birth occurred in 27/144 (18.9%) women with endometriosis and/or adenomyosis compared to 53/463 (11.4%) in disease-free women, corresponding to an aRR 1.63 (95% CI, 1.06-2.49), P = 0.025. However, this was only significant for late preterm birth between G week 34 + 0-36 + 6 [21 (16%) vs 37(8.0%), aRR 2.56(95% CI, 1.26-5.21)] and not for earlier preterm birth.

2- Antepartum hemorrhage [17 (11.8%) vs 30 (6.5%), aRR 2.02 (95% CI, 1.19-3.41), P = 0.009].

3-Hypertensive disorders of pregnancy [19 (13.2%) vs 31 (6.7%), aRR 2.26 (95% CI, 1.29-3.97), P = 0.004].

4-Pelvic pain [24 (16.7%) vs 40 (8.6), aRR 1.91 (95% CI, 1.21-3.01), P = 0.005] compared to disease-free women.

Wider implications of the findings:

Clinicians should recognize these risks when counseling affected women and consider tailored antenatal care, including early screening for hypertensive disorders and increased surveillance for placental complications.

However, it should be acknowledged that the underlying pathophysiological mechanisms of adenomyosis may differ from those of endometriosis, which should be considered when obstetric risks are discussed.

References

- 1- Becker CM, Bokor A, et al.; ESHRE Endometriosis Guideline Hum Reprod Open;:hoac009.,2022
- 2-Lalani S, Choudhry AJ, et al. , a systematic review and meta-analysis.Human Reproduction;33:1854-1865, 2018
- 3- Horton J, Sterrenburg M, et al.. Hum Reprod Update;25:592-632., 2019
- 4-Busnelli A, Di Simone N, et al.. Hum Reprod Update 30:751-788., 2024
- 5- Vendittelli F, Barasinski et al.Fertil Steril 2025;123:137-147., 2025
- 6-Sara Alson Kristina Mattsson, and Povilas Sladkevicius. Human Reproduction, April 30, 2026