

Egyptian Fertility Sterility Society

PCOS And Risk of Adverse Pregnancy Outcomes

What is known already

Prior meta-analyses and systematic reviews have suggested that deliveries to women with a history of PCOS are at an increased risk of pregnancy complications (Kjerulff et al., 2011; Qin et al., 2013; Palomba et al., 2015; Yu et al., 2016; Gilbert et al., 2018; Bahri Khomami et al., 2019)

These risk of pregnancy complications include:

- 1- Gestational diabetes
- 2- Pregnancy-induced hypertension and 3 –Preterm birth.

However, findings from some studies have been inconsistent and not all analyses have adjusted for potential confounding factors, such as BMI or chronic diabetes (Palomba et al., 2015). Moreover, many of these studies are of a small number size of women, limiting statistical power and generalizability (Yu et al., 2016)

What is New

At September 23, 2022, Farland et al. in a registry linkage study from Massachusetts compared 3552 deliveries with a history of PCOS and 88 273 deliveries without a history of PCOS.

They found that , those women with PCOS were more likely :

- 1-To be overweight or obese prior to pregnancy (51.0% versus 35.5%)
- 2- To have used ART (20.8% versus 7.9%) or to experience subfertility or infertility (47.7% versus 13.3%).
- 3-To deliver prematurely <37weeks gest. (RR: 1.17, 95% CI: 1.06–1.29)
- 4-To have a 51% greater risk of gestational diabetes (CI: 1.38–1.65) that was greater among women with a pre-pregnancy BMI <30 kg/m².
- 5-To have 25% greater risk of preeclampsia (CI: 1.15–1.35)

6- To have neonates born preterm (RR: 1.17, CI: 1.06–1.29)

7- To have a prolonged delivery hospitalization after additionally adjusting for gestational age (RR: 1.23, CI: 1.09–1.40)

Implications of the findings

Obstetricians should be aware of patients' PCOS status and closely monitor for potential pregnancy complications to improve maternal and infant perinatal health outcomes.

References:

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