

# Updates in Polycystic Ovary Syndrome to Improve the Fertility Journey



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The worldwide prevalence of PCOS is 8-13%. Recognized as the most common endocrine disorder in reproductive age women, PCOS increases reproductive, metabolic, and psychological risk. International evidence-based guidelines assist healthcare providers with establishing the diagnosis using Rotterdam criteria and in the management of this chronic disease. The common symptoms of anovulation and irregular menses may result in subfertility that can typically be managed with lifestyle modifications, oral ovulation induction medications and insulin sensitizers. Several robust clinical trials provide guidance regarding

the treatments for ovulation induction with use of medications such as letrozole, clomiphene citrate and metformin. Fewer patients may need to use injectable medications for ovulation induction and fast track to IVF. Although cumulative IVF success rates are high in women with PCOS due to a high oocyte yield, these patients are at an increased risk of ovarian hyperstimulation. The underlying hyperandrogenism and insulin resistance predispose women with PCOS to a 2-3-fold increase in cardiometabolic risk including obesity, hypertension, dyslipidemia, type 2 diabetes, and metabolic syndrome. It is therefore not surprising that data from large meta-analyses suggest that PCOS diagnosis is associated with an increased risk of miscarriage, gestational diabetes, gestational hypertension, pre-eclampsia and perhaps, preterm birth. Preconception counselling should be offered to all patients including screening for diabetes, dyslipidemia and depression. Growing evidence supports increased risk of depression, anxiety and eating disorders in this population and these conditions can impact sustained engagement with weight management. Optimization of cardiometabolic health through nutritional counselling, lifestyle changes and possible pharmacotherapy should be discussed with patients prior to initiating fertility therapies.