

The Effect of Metformin on Pregnancy Outcome Among Filipino Women with Polycystic Ovary Syndrome

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BACKGROUND

The use of metformin in PCOS is increasingly accepted but its therapeutic use during pregnancy is still a debatable issue. There are few local studies on the use of metformin among PCOS patients and data is lacking among Filipinos.

OBJECTIVES

To determine the effect of metformin on maternal and neonatal outcome among pregnant Filipino women with PCOS.

METHODOLOGY

DESIGN: Retrospective Cohort Study

• Outcome Measures:

Maternal outcome - rate of first trimester spontaneous abortion, development of gestational diabetes, pregnancy-induced hypertension, mode of delivery and gestational age of delivery.

Neonatal outcome -live birth rates, APGAR score, infants birth weight and development of congenital anomaly.

Figure. Schematic diagram of the study

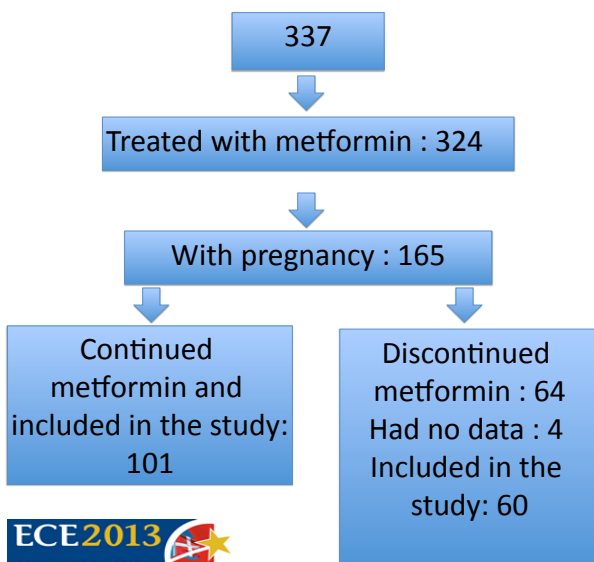


Table 1. Maternal outcome among pregnant PCOS

	CONTINUED METFORMIN(N=101) N(%)	DISCONTINUED METFORMIN(N=60) N(%)	P value
First trimester spontaneous abortion	5(5.0%)	21(36.2%)	<0.001
GDM	19(19.0%)	18(32.6%)	0.071
Pregnancy induced-hypertension	0	0	
Age of gestation			
Pre-term	9(9.8%)	1(2.7%)	0.317
Term	82(89.1%)	36(97.3%)	
Post-Term	1(1.1%)	0	
Mode of delivery			
NSVD	41(44.6%)	18(47.4%)	0.770
CS	51(55.4%)	20(52.6%)	

Table 2. Multivariate analysis of the effect of metformin during pregnancy on spontaneous abortion

Variable	Odds Ratio (95% CI)	P value
Metformin during pregnancy	0.168 (0.048-0.592)	0.005
Age diagnosed with PCOS	1.076 (0.932-1.241)	0.318
Serum Insulin	1.099 (0.995-1.214)	0.062

Table 3. Neonatal outcome among pregnant PCOS

	CONTINUED METFORMIN N(%)	DISCONTINUED METFORMIN N(%)	P value
Live birth	90 (97.8%)	37(100%)	0.366
Congenital anomaly on ultrasound	1(1.1%)	1(2.6%)	0.515
Congenital anomaly at birth	0	0	
	means± SD	means± SD	
APGAR score, 5 minutes	8.91 ± 0.32	8.94 ± 0.23	0.620
Birth weight (grams)	2840.97± 385	2941.56±456	0.242

CONCLUSION

In women with PCOS, continuous use of metformin during pregnancy reduced the rate of first trimester spontaneous abortion