	Controls (Median IQR)	PCOS (Median IQR)	P-value PCOS cohort vs. controls	AMH mutation (% rank of PCOS cohort)
	N=19	N=11		N=1
AMH (ng/ml)	3.9 (2.0-6.1)	10.5 (6.5-13.4)	<0.001	0.1 (<10th%)
Antral follicle count	16 (14-21)	44 (21-50)	0.003	43 (50th%)
LH (mIU/ml)	7.8 (5.5-12.9)	11.7 (6.5-18.0)	0.094	23.9 (>90th%)
Total Testosterone (ng/dl)	29.5 (24.5-34.5)	55.5 (49.5-62.5)	<0.001	89 (>90th%)
Free Testosterone (pg/ml)	2.2 (1.6-2.5)	6.2 (3.9-7.3)	<0.001	7 (75th%)
Androstenedione (ng/dl)	110.0 (89.0-137.0)	191.0 (112.0-230.0)	0.009	380 (>90th%)
DHEAS (μg/dl)	168.0 (101.0-213.0)	217.0 (187.0-272.0)	0.07	239 (67th%)

rs10417628 and could reduce its bioactivity to exaggerate the PCOS phenotype through impaired AMH inhibition of CYP17 transcription, promoting androgen induced loss of steroid negative feedback on LH.

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EXPRESSION PROFILES OF miRNA -369-5P AND miRNA-671-3P IN THE PLASMA OF PREGNANT WOMEN WITH POLYCYSTIC OVARY SYNDROME VERSUS NORMAL PREGNANCIES.

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OBJECTIVE: Women with polycystic ovary syndrome (PCOS) exhibit increased risk of pregnancy complications (1). MicroRNA-369-5p (miRNA) and miR-671-3p were associated with adipogenic differentiation of mesenchymal stromal cells (2), diabetes (3) and insulin secretion (4, 5). The aim was to determine if there are differences in expression levels of miR-369-5p and miR-671-3p in the cell free plasma samples between pregnant women with PCOS and healthy controls.

DESIGN: A pilot prospective cohort study.

MATERIALS AND METHODS: Singleton and spontaneous pregnancies were enrolled this study. Usingreal-time quantitative PCR, the expression level of miR -369-5p and miR-671-3p in the plasma were analyzed in pregnant women with PCOS were diagnosed before pregnancy according to the Rotterdam criteria, and had no obstetrical or medical complications (n=14) compared to healthy pregnant women (n=12). The relative expression of the target miRNAs in samples was compared to the calibrator and the results were expressed as relative quantification (RQ) values.

RESULTS: The characteristics of patients are listed in (Table 1). The expression levels of miR-671-3p were significantly increased in the pregnant patients with PCOS (RQ value= 5.53±2.98) versus healthy controls (RQ value= 1.20±0.64) (p=0.0001). Onreceiving operator characteristic analysis, areas under the curve of the expression ratio of miR-671-3p in PCOS was 0.96 (95%CI: 0.88-1.00). At a cut-off value of 1.89 for this miRNA, sensitivity and specificity values were 92% and 93%, respectively. There was no difference in the expression levels of miR-369-5p between PCOS and controls.

CONCLUSIONS: Our results indicated miR-671-3p has a candidate for diagnosis for PCOS and could be a potential biomarker during pregnancy.

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SUPPORT: None.

TABLE 1. Patient demographics, clinical and biochemical characteristics

Index Characteristics	PCOS (n=14) Mean ± SD	Control Group (n=12) Mean ± SD	P value
Age (years)	29.6 ± 4.34	26.6 ± 4.9	0.561
Gestational age at sampling (weeks)	29.1 ± 5.1	28.9 ± 0.2	< 0.0001
Pre-Pregnancy BMI, kg/m2	28.3 ± 6.1	23.6 ± 2.9	< 0.0001
BMI (kg/m2)	31.2 ± 5.7	26.4 ± 2.9	0.004
Systolic blood pressure at sampling (mmHg)	106.4 ± 10.1	101.7 ± 5.8	0.028
Diastolic blood pressure at sampling (mmHg)	62.8 ± 7.3	60.0 ± 6.0	0.106
HbA1c (%)	5.3 ± 0.2	5.1 ± 0.3	0.844
Fasting glucose (mg/dl) at sampling	76.0 ± 9.1	75.9 ± 8.7	0.670
1-h glucose (mg/dl) at sampling following a 75-g OGTT	139.7 ± 27.5	122.7 ± 28.9	0.952
2-h glucose (mg/dl) at sampling following a 75-g OGTT	108.0 ± 24.4	97.5 ± 19.0	0.386

PCOS, polycystic ovary syndrome; SD, standard deviation; BMI, body mass index; GA, gestational age; OGTT, oral glucose tolerance test Data presented as mean ± SD and compared using unpaired t-test *p < 0.05.