Overview

Purpose: The purpose of the study is to research the negative outcomes in pregnancy of women with polycystic ovarian syndrome, while taking into account the reproductive assistance the women have had. The hypothesis appears to be that women with polycystic ovarian syndrome will have negative effects on the birth and pregnancy outcomes.

Design: Population based cohort study. 3787 singleton births from women diagnosed with PCOS and 1191336 singleton births from women without such diagnosis.

Sample: The birth of one child to a mother that was diagnosed with PCOS that is registered in the Swedish Birth Registry between 1995 and 2007.

Results

The mothers diagnosed with PCOS had double the prevalence of a body index greater than 25.0. The mothers diagnosed with PCOS were more likely to be diagnosed with preeclampsia, very preterm labor, and higher risks of cesarean sections. The newborns of the mothers diagnosed with PCOS had an increased risk for being large for gestational age, meconium aspiration, and low Apgar scores at five minutes.

Strength of Study

Level of Study: 4
Quality of Study: Medium

Clinical Significance

The study presents evidence that mothers diagnosed with PCOS are at risk for more adverse outcomes during pregnancy, delivery, and for the newborn.


PCOS and Obesity’s Effects on Pregnancy

By: Mya Hager, Kylee Kiel, Jordan Sailer

PICOT Question

For females of reproductive age, does obesity relative to PCOS increase the risk of adverse effects during pregnancy, delivery, and neonatal outcome?

Why is this a problem?

Obesity already brings health risks upon anyone let alone a pregnant women requiring a new metabolic normal to care for a growing fetus. Then when you add in PCOS to any pregnancy the risks of developing certain health problems is already increased as well.

Results

4% of PCOS placentas and 16% of low-risk had chronic inflammation of the fetal membranes
1% of PCOS placentas and 9% of low-risk had necrosis of fetal membranes
30% of PCOS placentas and 10% of low-risk had chorioamnionitis
8% of PCOS placentas and 1% of low-risk had funisitis
19% of PCOS placentas and 13% of low-risk had villitis
13% of PCOS placentas and 5% of low-risk had thrombosis
26% of PCOS placentas and 16% of low-risk had ischemia
16% of PCOS placentas and 6% of low-risk had infarction
41% of PCOS placentas and 23% of low-risk had villous immaturity
47% of PCOS placentas and 16% of low-risk had nucleated red blood cells

Strength of Study

Level of the Study: Level 4
Quality of the Study: Good

Clinical Significance

The results of this study shows that women with PCOS tend to have more placental abnormalities than healthy, low-risk women.


Clinical Significance

The study presents evidence that mothers diagnosed with PCOS are at risk for more adverse outcomes during pregnancy, delivery, and for the newborn.