

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.

Roos, N., Kieler, H., Sahlin, L., Ekman-Ordeberg, G., Falconer, H., & Stephansson, O. (2012). Risk of Adverse Pregnancy Outcomes in Women With Polycystic Ovary Syndrome. *Obstetric Anesthesia Digest*, 32(4), 220. doi: 10.1097/01.aoa.0000422700.58780.33

PCOS and Obesity's Effects on Pregnancy

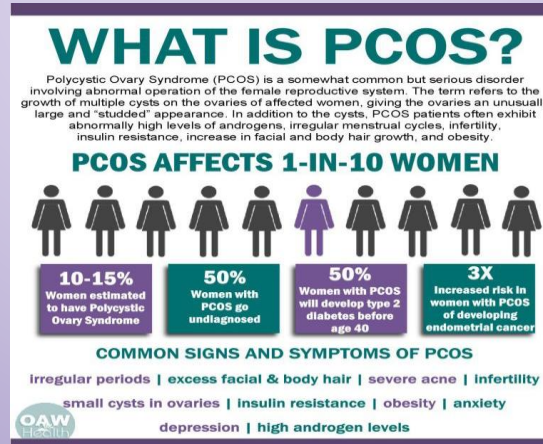
By: Mya Hager, Kylee Kiel, Jordan Sailer

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 woman 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.



Overview

Purpose: The purpose of this study is to compare the placental characteristics of women with PCOS and those with low risk pregnancies. The question was, if microscopic and macroscopic placental characteristics in a heterogeneous group of women diagnosed with PCOS were different from those of the low-risk population.

Design: Prospective cohort study. 73 placentas from women with PCOS were compared to the placentas of 209 low-risk women.

Sample: Women were followed from conception to delivery. Their placenta was taken and analyzed after delivery micro/macrospectically and compared with healthy women who had a spontaneous term birth or elective caesarean section.

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.

Koster, M. P. H., de Wilde, M. A., Veltman-Verhulst, S. M., Houben, M. L., Nikkels, P. G. J., van Rijn, B. B., & Fauser, B. C. J. M. (2015). Placental characteristics in women with polycystic ovary syndrome. *Human Reproduction*, 30(12), 2829-2837. <https://doi.org/ezroxy.libraries.wright.edu/10.1093/humrep/deve265>