

## AMH AS A PREDICTIVE FACTOR OF MISCARRIAGES IN PCOS WOMEN.

### Authors

SZAFAROWSKA, MONIKA, Author, JERZAK, MAŁGORZATA, Co-Author

### Abstract Body

The polycystic ovary syndrome is accompanied by an increased risk of different complications during pregnancy (miscarriage, gestational diabetes, gestational hypertension, pre-eclampsia, fetal hypotrophy). The aim of this prospective study was to assess the predictive value of AMH in pregnancy outcome among the study women. The study included 44 infertile women (aged 25-44 years) with the polycystic ovary syndrome (according to ESHRE/ASRM). Other causes of reproductive failures were excluded. The control group were 20 healthy fertile women. According to the assumptions of the study, AMH tests were performed on venous blood serum collected from patients between day 3 and 5 of the menstrual cycle. Eighteen months after the enrollment into the study, a final survey containing questions on the pregnancy and its course was conducted by email among the participants. A higher values of AMH concentration were observed in the study group compared to the control group; however, the difference was not statistically significant ( $p=0.136$ ). There was no statistically significant relationship between the concentrations of the AMH and the selected demographic or clinical factors. Comparing the concentrations of the AMH among women who became pregnant, significantly higher levels were observed in women whose pregnancy ended in miscarriage compared to women whose pregnancy ended with the birth of a healthy child ( $p=0.002$ ). Thus, AMH seems to be a good predictor of miscarriage in women who become pregnant (AUC – 89.75 (95% CI 77.7-100.0%)). It was observed that the cut-off value of AMH is  $\geq 6.1$  ng/mL, the specificity predictor of miscarriage is 100.0%, and the sensitivity of the predictor is 76.2%. Our results suggest, that the AMH concentration in the blood serum at the threshold value of  $\geq 6.1$  ng/mL is a significant negative predictor of a successful clinical pregnancy in women with PCOS.