13th BIALYSTOK INTERNATIONAL MEDICAL CONGRESS FOR YOUNG SCIENTISTS MAY 17-19TH 2018

BOOK OF ABSTRACTS
Title: Status of the circulation in the uterine arteries in pregnant women
Authors: Marharyta Shumska, Anton Lemesh, Aksana Valchkevich
Tutor/Tutors: Dzmitry Valchkevich
University: Grodno State Medical University

INTRODUCTION: Care for the reproductive health of women is one of the priorities of both national and world medicine. Adequate placental blood flow provides a normal course of pregnancy. Infringement of a blood flow can lead to a delay of an intrauterine development of a fetus; therefore, the main reason of appointment of Dopplerometry during pregnancy is mismatch of the sizes of a body or organs of fetus to norms.

AIM OF THE STUDY: To study the status of the circulation of the uterus in women with a normal pregnancy and the threat of miscarriage.

MATERIALS AND METHODS: The material for the study was 100 patients with a gestation period of 16-34 weeks with the threat of miscarriage and 46 women with a normal pregnancy. The study was carried out with the help of ultrasound, morphometry and statistical method. For correlation, the Spearman coefficient was used.

RESULTS: According to our study, the diameter of uterine arteries in women with the threat of miscarriage was 4.92 ± 0.73 mm on the right and 4.8 ± 0.78 mm on the left. In women with normal pregnancy, the uterine arteries were narrower (3.78 ± 0.38 mm on the right and 3.98 ± 0.30 mm on the left, p<0.05). In addition, in 52 women with a threat of miscarriage, the Dopplerometry of uterine arteries was performed (the resistance index was established). On the right, the resistance index was 0.52 ± 0.10, on the left - 0.54 ± 0.10. In addition, it was found that in 18 women the resistance index values do not correspond to the norms. In five patients, resistance index is above the norm in both arteries, in nine - above in the left uterine artery only, and in three - in the right uterine artery only. One woman had resistance index in the left uterine artery below the norm. The dependence of the diameter of both uterine arteries on each other was shown in women with the threat of miscarriage (R = 0.7, p <0.05). It was also found that the index of resistance in the right uterine artery correlates with the index of resistance in the left uterine artery (R = 0.34, p <0.05).

CONCLUSIONS: Uterine arteries in women with the threat of miscarriage are larger than in women with normal pregnancy. In 1/3 of women who underwent Dopplerometry, the resistance index values are below normal. Women with a threat of miscarriage have a correlation of diameters and indices of resistance in the uterine arteries.